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Set	Items	Description
S1	84224	(VIBRAT? OR SHOCK OR SEISMIC) (3N) (ABSORPTION OR ABSORB???) - OR DAMP? OR RESIST? OR CUSHION)
S2	57220	(ELECTRONIC() (DEVICE?? OR UNIT?? OR SYSTEM?? OR APPARATUS) OR (CD OR DVD OR (DIGITAL() VERSATILE OR COMPACT) ()DISC?? OR D- ISK??)) () (PLAYER?? OR UNITS OR SYSTEM??)
S3	606073	RESIN?? OR POLYETHYLENE
S4	2668506	BUCKLE?? OR BUCKLING OR BEND?? OR MOMENT OR TOURQUE OR C- OMPRESS? OR DEFORM?
S5	157	AU=(KUWAJIMA, H? OR KUWAJIMA H?)
S6	68	S1(S)S2
S7	52	RD (unique items)
S8	1	S7(S)S3
S9	2	S7(S)S4
S10	2	S9 NOT S8
S11	1	S10 NOT MOTORCYCLE
S12	0	S7 AND S5
S13	47	S7 NOT PY>2003
S14	3	S13 AND (S3 OR S4)
S15	0	S14 NOT (S8:S11)
S16	0	S13 AND ((VERTICAL OR ORTHOGONAL) (3N) FORCE???)
S17	0	S13(3N) (CASE?? OR CASING OR CARTRIDGE?? OR HOUSING)

8/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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00419785 E.I. Monthly No: EI7412080976
Title: UNIQUE SILICONE MATERIALS AND TECHNIQUES FOR MICRO AND MACRO
ELECTRONIC PACKAGING.

Author: Smith, Schuyler B.
Corporate Source: Dow Corning Corp, Midland, Mich
Source: SAMPE Natl Symp and Exhib, 19th, Pap, Buena Park, Calif, Apr 23-25 1974 p 686-692. Publ by SAMPE Natl Bus Off (Vol 19), Azusa, Calif, 1974
Publication Year: 1974
Language: ENGLISH

...Abstract: silicone technology that have resulted in new and improved products for use in packaging airborne **electronic systems**. These products include gelatinous membranes for I. C. packaging, thermally conductive noncorrosive cements for power devices, conformal coatings for printed circuit arrays, flame retardant impregnants, and embedding compounds, **vibration damping** materials, optical bonding **resins** and controlled volatility sealants.

11/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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02054022 E.I. Monthly No: EI8612117638 E.I. Yearly No: EI86006990
Title: **CALCULATED CHEMISORPTION PROPERTIES OF ATOMS AND DIPOLES.**
Author: Holmstroem, Stefan
Corporate Source: Chalmers Univ of Technology, Goteborg, Swed
Source: Chalmers Tekniska Hogskola, Doktorsavhandlingar n 561 1986 37p
Publication Year: 1986
CODEN: DCTHAT ISSN: 0366-8746
Language: ENGLISH

...Abstract: method that self-consistently solves the Kohn-Sham equations for a localized perturbation in an **electronic system**. The metallic substrate is modelled by a semi-infinite jellium, and results are obtained for potential energy, induced dipole moment, density of states and, in the case of a chemisorbed dipole, **vibrational damping** of the internal stretch mode. (Edited author abstract) 81 refs.

13/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2006 Institution of Electrical Engineers. All rts. reserv.

08838258 INSPEC Abstract Number: C2004-02-3360B-045
Title: **A magneto-rheological fluid shock absorber for an off-road motorcycle**
Author(s): Erickson, E.O.; Gordaninejad, F.
Author Affiliation: Dept. of Mech. Eng., Nevada Univ., Reno, NV, USA
Journal: International Journal of Vehicle Design vol.33, no.1-3 p. 139-52
Publisher: Inderscience Enterprises,
Publication Date: 2003 Country of Publication: Switzerland
CODEN: IJVDDW ISSN: 0143-3369
SICI: 0143-3369(2003)33:1/3L.139:MRFS;1-7
Material Identity Number: P806-2003-006
U.S. Copyright Clearance Center Code: 0143-3369/03/\$10.00+.50
Language: English
Subfile: C
Copyright 2004, IEE

...Abstract: theoretical and experimental investigations of a controllable, semi-active, fail-safe, magneto-rheological fluid (MRF) **shock absorber** for the rear suspension of an off-road motorcycle. A fail-safe MRF damper refers...
...that retains a minimum required damping capacity in the event of a power supply or **electronic system** failure. A theoretical fluid

mechanics-based model is developed to predict the controllable damping force...

... this proof-of-concept study is a retrofit of a Honda XR 400 enduro motorcycle **shock absorber**. The MRF damper emulates the original equipment manufacturer **shock absorber** performance in its passive off mode (i.e., no applied magnetic field) and provides controllable...

13/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2006 Institution of Electrical Engineers. All rts. reserv.

08838257 INSPEC Abstract Number: C2004-02-3360B-044
Title: **Semi-active, fail-safe magneto-rheological fluid dampers for mountain bicycles**
Author(s): Breese, D.G.; Gordaninejad, F.
Author Affiliation: Dept. of Mechanical Eng., Nevada Univ., Reno, NV, USA
Journal: International Journal of Vehicle Design vol.33, no.1-3 p. 128-38
Publisher: Inderscience Enterprises,
Publication Date: 2003 Country of Publication: Switzerland
CODEN: IJVDDW ISSN: 0143-3369
SICI: 0143-3369(2003)33:1/3L.128:SAFS;1-A
Material Identity Number: P806-2003-006
U.S. Copyright Clearance Center Code: 0143-3369/03/\$10.00+.50
Language: English
Subfile: C
Copyright 2004, IEE

...Abstract: that retains a minimum required damping capacity in the event of a power supply or **electronic system** failures. Two new MRF dampers are designed and tested with the intent of being used...
... The MRF dampers are designed to emulate the performance of the original equipment manufacturer (OEM) **shock absorbers** in the passive off mode (i.e., no magnetic field). Procedures and results are presented...

13/3,K/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC
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08826172 INSPEC Abstract Number: B2004-02-7630A-002, C2004-02-3360L-042
Title: **Aerospace electronics weight reduction through the use of active mass damping**
Author(s): Esser, B.; Huston, D.R.; Miller, J.
Author Affiliation: Mech. Eng. Dept., Vermont Univ., Burlington, VT, USA
Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.5052 p.433-44
Publisher: SPIE-Int. Soc. Opt. Eng,
Publication Date: 2003 Country of Publication: USA
CODEN: PSISDG ISSN: 0277-786X
SICI: 0277-786X(2003)5052L.433:AEWR;1-8
Material Identity Number: C574-2003-262
U.S. Copyright Clearance Center Code: 0277-786X/03/\$15.00
Conference Title: Smart Structures and Materials 2003. Damping and Isolation
Conference Sponsor: SPIE; ASME; Soc. Experimental Mechanics; Boeing Co.; Rhombus Consultants Group; et al
Conference Date: 3-5 March 2003 Conference Location: San Diego, CA, USA
Language: English

Subfile: B C
Copyright 2004, IEE

...Abstract: vibration and their associated stresses and strains in such applications add significant weight to these electronic systems. The vibration protection they provide is crucial, however, as the nature of aerospace vehicles requires...

... maintaining equal or superior vibration protection. This paper presents results of electronic circuit board active vibration reduction of damping sinusoidal excitations near resonance, free vibration damping, as well as future strategies for the active vibration control system.

13/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
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08576530 INSPEC Abstract Number: B2003-05-6250-025
Title: Bluetooth wireless network communications technologies to meet environmental requirements in motor vehicles
Author(s): Pohlmann, G.
Journal: Elektronik Praxis no.21 p.180-4
Publisher: Vogel-Verlag,
Publication Date: 5 Nov. 2002 Country of Publication: Germany
CODEN: EKPxAM ISSN: 0341-5589
SICI: 0341-5589(20021105)21L.180:BWNC;1-M
Material Identity Number: E248-2002-022
Language: German
Subfile: B
Copyright 2003, IEE

...Abstract: linking for motor vehicle applications. Diagnosis and maintenance problems are examined, and interference with other electronic systems is considered. Bluetooth range is stated as 10 to 15 metres, when output power is...

... lists for transport vehicles is considered. Problems of temperature dependence are stated. The need for vibration and shock resistance, and for operation between -40 deg C and +85 deg C is emphasised. Examines interference...

13/3,K/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC
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07915789 INSPEC Abstract Number: B2001-06-3120B-038
Title: A study of shock-resistance design of suspension subjected to impulsive excitation
Author(s): Sung Jin Lee; Soon Kyo Hong; Jang Moo Lee
Author Affiliation: Opto-Mechatronics Lab., Samsung Electron. Co., South Korea
Journal: IEEE Transactions on Magnetics Conference Title: IEEE Trans. Magn. (USA) vol.37, no.2, pt.1 p.826-30
Publisher: IEEE,
Publication Date: March 2001 Country of Publication: USA
CODEN: IEMGAQ ISSN: 0018-9464
SICI: 0018-9464(200103)37:2:1L.826:SSRD;1-1
Material Identity Number: I101-2001-007
U.S. Copyright Clearance Center Code: 0018-9464/2001/\$10.00
Conference Title: 2000 Asia-Pacific Magnetic Recording Conference. Digest of APMRC2000

Conference Sponsor: IEEE Magnetics Soc.; IEEE Magnetics Soc. Japan Chapter; Storage Res. Consortium, Japan; ASME; Int. Disk Drive Equipment Mater. Assoc. Japan (IDEMA Japan); Inst. Electr. Eng. Japan; Sensor & Micromachine Div.; Japan Soc. Tribologists (JAST); Japan Soc. Mech. Eng. (JSME); Japan Soc. Precision Eng. (JSPE); Magnetic Soc. Japan (MSJ)
Conference Date: 6-8 Nov. 2000 Conference Location: Tokyo, Japan
Language: English
Subfile: B
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...Abstract: of this analytical model is to try to quantitatively describe the dynamics of the head/ disk system. The results are in good agreement with those of FE simulations and experiments. It is...

... study of suspension design is made to find out the optimal value for increasing the shock resistance of a disk drive.

13/3,K/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC
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06251211 INSPEC Abstract Number: B9606-0170C-006, C9606-3260-005
Title: Modeling and design methodology for mechatronic systems
Author(s): Isermann, R.
Author Affiliation: Inst. of Autom. Control, Tech. Univ. Darmstadt, Germany
Journal: IEEE/ASME Transactions on Mechatronics vol.1, no.1 p.16-28
Publisher: IEEE,
Publication Date: March 1996 Country of Publication: USA
CODEN: IATEFW ISSN: 1083-4435
SICI: 1083-4435(199603)1:1L.16:MDMM;1-N
Material Identity Number: D486-96001
U.S. Copyright Clearance Center Code: 1083-4435/96/\$05.00
Language: English
Subfile: B C
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...Abstract: functions. After discussing the mutual interrelations between the design of the mechanical system and digital electronic system the different ways of integration within mechatronic systems and the resulting properties are described. The...
... examples of applications are given, like adaptive control of electromagnetic and pneumatic actuators, adaptive semiactive shock absorbers for vehicle suspension, and electronic drive-chain damping.

13/3,K/7 (Item 7 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2006 Institution of Electrical Engineers. All rts. reserv.

05045674 INSPEC Abstract Number: B9201-0170J-036
Title: Performance of new silicone adhesives and encapsulants at high and low temperatures
Author(s): Mollie, J.-P.; Paquet, R.L.
Conference Title: Eighth International Conference on Automotive Electronics (Conf. Publ. No.346) p.174-7
Publisher: IEE, London, UK
Publication Date: 1991 Country of Publication: UK xii+218 pp.
ISBN: 0 85296 525 7
Conference Date: 28-31 Oct. 1991 Conference Location: London, UK
Language: English
Subfile: B

...Abstract: from construction to aerospace. Silicones are very successful in providing the environmental protection of car **electronic systems**. Automotive electronics are exposed to hazards that most electronic components never encounter, including high humidity...

... ideally suited for use in such demanding situations: they can be soft and flexible for **vibration damping**; they are thermally stable from -50 degrees C to +200 degrees C (standard); and silicones...

... insulators. New materials have been specifically designed to meet the increasingly stringent requirements imposed upon **electronic systems** in automotive applications. The authors discuss the characteristics and performance of the silicones.

13/3,K/8 (Item 8 from file: 2)

DIALOG(R)File 2:INSPEC

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04320539 INSPEC Abstract Number: B89021637, C89018361

Title: Hydraulic damping restrained electronically

Author(s): Van der Wal, R.P.

Journal: Elektronica vol.36, no.21 p.35, 37, 39, 41-5, 47, 49

Publication Date: 4 Nov. 1988 Country of Publication: Netherlands

CODEN: LKTNDO ISSN: 0033-7854

Language: Dutch

Subfile: B C

Abstract: The author provides an introduction to the use of electronics in controlling **shock0 - absorbers** in e.g. vehicles. He begins by outlining (qualitatively) the physics of oscillating (damped) loads and the design of **shock absorbers** and then looks in detail at **electronic systems**, their programs, safety and requirements. Finally he examines central control units, operating units and servo...

13/3,K/9 (Item 9 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2006 Institution of Electrical Engineers. All rts. reserv.

04280868 INSPEC Abstract Number: C89009807

Title: Control of fast mechanisms with digital signal processors

Author(s): Hanselmann, H.; Henrichfreise, H.; Hostmann, A.; Schwarte, A.

Journal: Elektronik vol.37, no.19 p.119-29

Publication Date: 16 Sept. 1988 Country of Publication: West Germany

CODEN: EKRKAR ISSN: 0013-5658

Language: German

Subfile: C

...Abstract: controlling fast mechanical movements. A series of applications are quoted such as replacing the conventional **shock absorbers** on motor vehicle wheels with active or semi-active **electronic systems** based on the TMS digital signal processor family; the control of a robot arm to...

13/3,K/10 (Item 10 from file: 2)

DIALOG(R)File 2:INSPEC

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04023061 INSPEC Abstract Number: B88000173

Title: Electronic assemblies for resistance to vibration and shock

Author(s): Markstein, H.W.

Journal: Elettronica Oggi no.47 p.107-8, 110, 112
Publication Date: Sept. 1987 Country of Publication: Italy
CODEN: ELOGDA ISSN: 0391-6391
Language: Italian
Subfile: B

Abstract: Given that most modern electronic systems consist of a series of printed circuit boards mounted in a frame, the problem of designing for resistance to shock and vibration, as for instance in apparatus for use in aerospace, is mainly that of suitability dimensioning
...

13/3,K/11 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC
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03836994 INSPEC Abstract Number: B87020788
Title: The Becker-Mexico-auto receiver/CD-player from Germany
Author(s): Muhlethaler, T.
Journal: Sound vol.9, no.11 p.20-2
Publication Date: Nov. 1986 Country of Publication: Switzerland
CODEN: SRTEEM ISSN: 0258-9141
Language: German
Subfile: B

...Abstract: Disc electronic Kurier 860. The unit is furnished with a four-wave-tuner and a shock - resistant CD - player -system, which is Japanese-made, and meets most up-to-date requirements. All technical as...

13/3,K/12 (Item 12 from file: 2)
DIALOG(R)File 2:INSPEC
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03768155 INSPEC Abstract Number: B86069968
Title: Progress in the techniques of CD-reproducers
Journal: Funk-Technik vol.41, no.7 p.296-300
Publication Date: July 1986 Country of Publication: West Germany
CODEN: FUTEAW ISSN: 0016-2825
Language: German
Subfile: B

Abstract: Two new compact disc players from the German Thomson Brandt organization are described. Both the CD 20 and CD 40...

... a stored focus level memory. Other features are fast search and band access and elaborate shock - absorbing precautions.

13/3,K/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC
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01081806 INSPEC Abstract Number: A70001017
Title: Infrared and electronic absorption spectra of quinoline
Author(s): Amma, R.A.; Nair, K.P.R.; Singh, S.N.
Author Affiliation: Banaras Hindu Univ., Varanasi, India
Journal: Indian Journal of Pure and Applied Physics vol.7, no.8 p. 567-9
Publication Date: Aug. 1969 Country of Publication: India
CODEN: IJOPAU ISSN: 0019-5596
Language: English

Subfile: A

...Abstract: observed frequencies have been correlated to the Raman frequencies and assigned to different modes of vibrations. The electronic absorption spectrum of the molecule in the vapour phase has also been recorded in the region 3150-2600 AA. Two electronic systems consisting of discrete bands due to n- pi * and pi - pi * transitions have been observed...

13/3,K/14 (Item 14 from file: 2)
DIALOG(R)File 2:INSPEC
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0000843270 INSPEC Abstract Number: 1967A28828
Title: Electronic absorption spectrum of ferrocene
Author(s): Armstrong, A.T.; Smith, F.; Elder, E.; McGlynn, S.P.
Journal: Journal of Chemical Physics 46 11 p.4321-4328
Publication Date: 1 June 1967 Country of Publication: USA
Language: English
Subfile: A
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...Abstract: first-order vibronic stealing from the ~50 000-cm SUP -1 band. The higher-energy absorption bands show vibrational structure, and this structure is analyzed herein; unfortunately, the resolution is restricted by "molecular" reasons...

... are heavily localised on the aromatic rings in contrast to the three low-energy diffuse electronic systems in Regions IV, V, and VI which contain much d-orbital and intramolecular charge-transfer...

13/3,K/15 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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2300808 NTIS Accession Number: DE2004-822318/XAB
Downhole Vibration Monitoring and Control System
Coborn, M. E.
APS Technology, Inc., Cromwell, CT.
Corp. Source Codes: 8888888888
Sponsor: Department of Energy, Washington, DC.
Feb 2003 one CD-ROM contains 15 page document
Languages: English
Journal Announcement: USGRDR0502
This document is color dependent and/or landscape layout. It is currently available on CD-ROM and paper only. CD-ROM contains a 15 page document.
Sponsored by Department of Energy, Washington, DC.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders@ntis.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: AV A03

...string. It is composed of two main elements. The first is a multi-axis active vibration damper to minimize harmful axial, lateral and torsional vibrations, and thereby increase both rate of penetration...
... a drillstring response including the active damper; a top-level design of the mechanical and electronic systems; analyzing the anticipated performance of the damper by modeling and laboratory testing of small prototypes...

13/3,K/16 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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1952313 NTIS Accession Number: AD-A304 544/0
Joint STARS RTMM Carrying Case
(Final rept. Apr 93-Jan 96)
Tekesky, R. S.
Air Force Packaging Technology and Engineering Facility, Wright-Patterson AFB, OH.
Corp. Source Codes: 112065000; 430739
Report No.: AFMC-96-R-02
Jan 96 49p
Languages: English
Journal Announcement: GRAI9616
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A04/MF A01

The Electronic System Center (ESC) at Hanscom AFB, MA requested the Air Force Packaging Technology and Engineering Facility...

... driving factors in the design. The case requirements are to be waterproof, one person carry, shock absorbent, house six RTMM's, and limited to a maximum weight of 42 pounds. After reviewing...

13/3,K/17 (Item 3 from file: 6)
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1704053 NTIS Accession Number: TIB/A92-03862
Betriebssicherheit und Einsatzverlaessigkeit von Hubwerkskonzepten mit redundanten Komponenten. (Operational safety and reliability of hoisting gear concepts with redundant components)
(Diss)
Leicht, B.
Ruhr Univ., Bochum (Germany, F.R.). Lehrstuhl fuer Maschinenelemente und Foerdertechnik.
Corp. Source Codes: 004202027;
Sponsor: Bochum Univ. (Germany). Inst. fuer Konstruktionstechnik.
Report No.: ISBN 3-89194-099-8
13 Dec 91 164p
Languages: German Document Type: Thesis
Journal Announcement: GRAI9307
In German. Bochum Universitaet, Institut fuer Konstruktionstechnik. Schriftenreihe, no. 91/10.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC E14

... device to equalize the load of redundant ropes is tested to prove its capability of absorbing the dynamic shock in transferring the load of a damaged rope to the remanent one. Various electronic systems to release the emergency safety brake are theoretically and experimentally investigated. The dynamic behaviour of...

13/3,K/18 (Item 4 from file: 6)

DIALOG(R)File 6:NTIS
(c) 2006 NTIS, Int'l Cpyrght All Rights Res. All rts. reserv.

1525781 NTIS Accession Number: MIRA-90/77
What Is the Trend in Suspensions
Brambilla, E.
Motor Industry Research Association, Nuneaton (England).
Corp. Source Codes: 076102000
Report No.: MIRA TRANS-2/90
Aug 89 11p
Languages: English Document Type: Translation
Journal Announcement: GRAI9021
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC\$72.00

... and reconcile the two requirements, the technicians have had to 'reinvent' the spring and the **shock absorber**. Pneumatic, hydraulic and **electronic systems** which are already in use today, will later become more widespread. The report describes trends...

13/3,K/19 (Item 5 from file: 6)
DIALOG(R)File 6:NTIS
(c) 2006 NTIS, Int'l Cpyrght All Rights Res. All rts. reserv.

0123688 NTIS Accession Number: AD-657 140/XAB
Sandwich Plates Having Dissipative Cores, as Vibration Energy Absorbers
Plass, H. J.
Texas Univ Austin Defense Research Lab
Corp. Source Codes: 107500
Report No.: DRL-385
15 Jul 56 22p
Journal Announcement: USGRDR6720
Prepared in cooperation with Johns Hopkins Univ., Silver Spring, Md.
Applied Physics Lab., CF-2542.
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A02/MF A01

... is mounted. It is desirable to keep the amplitude of these vibrations in the sensitive **electronic units** as low as possible. To accomplish this, **vibration absorbers** may be incorporated between the frame of the missile and the equipment deck, or the deck itself may be constructed so that it acts as a continuous **vibration absorber**. Such a deck may be made in the form of a sandwich plate, that is...

13/3,K/20 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

06014948 E.I. No: EIP02096876964
Title: **Study of shock-resistance design of suspension subjected to impulsive excitation**
Author: Lee, Sung Jin; Hong, Soon Kyo; Lee, Jang Moo
Corporate Source: Opto-Mechatronics Laboratory Corporate R and D Center
Samsung Electronics Co., Suwon, South Korea
Source: IEEE Transactions on Magnetics v 37 n 2 I March 2001. p 826-830

Publication Year: 2001
CODEN: IEMGAQ ISSN: 0018-9464
Language: English

...Abstract: of this analytical model is to try to quantitatively describe the dynamics of the head/ disk system. The results are in good agreement with those of FE simulations and experiments. It is...

...study of suspension design is made to find out the optimal value for increasing the shock resistance of a disk drive. 8 Refs.

13/3,K/21 (Item 2 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

04753848 E.I. No: EIP97073738298
Title: Investigation on the vibration resistance of optical head in the optical disk
Author: Huang, Ying; Ruan, Yu
Corporate Source: Huazhong Univ of Science and Technology, Wuhan, China
Source: Guangdian Gongcheng/Opto-Electronic Engineering v 24 n 1 Feb 1997. p 31-35
Publication Year: 1997
CODEN: GUGOEC ISSN: 1003-501X
Language: Chinese

...Abstract: range of 5-2,000Hz was designed for it. The experimental results on the optical- disk system equipped with the miniature vibration-isolating system show that (1) the vibration - resistance performance of the optical disk can reach up to 3.5g; (2) the shock-proof ...

13/3,K/22 (Item 3 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

04746407 E.I. No: EIP97073728051
Title: Patent and inventorship issues over the last thirty years of optical storage technology
Author: Gregg, David Paul
Corporate Source: Eclectic Associates, Culver City, CA, USA
Conference Title: Proceedings of the 1997 Optical Data Storage Topical Meeting, ODS
Conference Location: Tucson, AZ, USA Conference Date: 19970407-19970409
E.I. Conference No.: 46597
Source: Topical Meeting on Optical Data Storage - Digest of Technical Papers 1997. Optical Soc of America, Washington, DC, USA, 97TH8273. p 7-8
Publication Year: 1997
CODEN: TMOSEF
Language: English

...Abstract: for recordable disks with error-reducing signal processing. And in 1993, one patent on a shock - resistant disk - player combination. Since 1989, effort has been shifted from the optical disk to fast-access optical...

13/3,K/23 (Item 4 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03787298 E.I. No: EIP94011180788

Title: Determination of temperature and no concentrations through the dark zone of solid-propellant flames

Author: Vanderhoff, J.A.; Teague, M.W.; Kotlar, A.J.

Corporate Source: US Army Ballistic Research Lab, Aberdeen Proving Ground, MD, USA

Conference Title: Proceedings of the 24th International Symposium On Combustion

Conference Location: Sydney, Aust Conference Date: 19920705-19920710

E.I. Conference No.: 19626

Source: Symposium (International) on Combustion 1992. Publ by Combustion Inst, Pittsburg, PA, USA. p 1915-1922

Publication Year: 1992

CODEN: SYMCAQ ISSN: 0082-0784

Language: English

...Abstract: spectrometer-intensified photodiode-array detectors formed the basic experimental setup from which NO and OH absorption spectra were acquired. vibrationally resolved transitions in the A**2 Sigma - X**2 Pi electronic system of NO from 230 to 250 nm comprise the absorption spectra from which temperatures and...

13/3,K/24 (Item 5 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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03603968 E.I. Monthly No: EIM9305-025459

Title: Control 92 -Enhancing Australia's Productivity Through Automation, Control and Instrumentation.

Author: Anon (Ed.)

Conference Title: Control 92 -Enhancing Australia's Productivity Through Automation, Control and Instrumentation

Conference Location: Perth, Aust Conference Date: 19921102

E.I. Conference No.: 17778

Source: National Conference Publication - Institution of Engineers, Australia n 92 pt 15 1992. Publ by IE Aust, Barton, Aust. 468p

Publication Year: 1992

CODEN: NPIEDX ISSN: 0313-6922

Language: English

...Abstract: adaptive controllers using neural networks, real-time knowledge-based diagnostic systems, fuzzy logic control systems, vibration damping with active control systems, rule-based expert systems, supervisory control and data acquisition (SCADA) technology...

...process control systems, programmable controller software design, and the man-machine interface as an intelligent electronic system.

13/3,K/25 (Item 6 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

03092286 E.I. Monthly No: EIM9107-031825

Title: Modular concept for suspension control.

Author: Decker, H.; Schramm, W.; Kallenbach, R.

Conference Title: Eighteenth FISITA Congress - The Promise of New Technology in the Automotive Industry

Conference Location: Torino, Italy Conference Date: 19900507

E.I. Conference No.: 13957

Source: Proceedings - Society of Automotive Engineers. Publ by SAE, Warrendale, PA, USA. p 27-35

Publication Year: 1990
CODEN: PSOED4 ISSN: 8756-8470
Language: English

...Abstract: available. These valves allow switching times of 5 milliseconds and the complete integration into a **shock absorber**. Thus, semiactive suspension-control concepts can now be realized in vehicles that could formerly only...

...classic or fast load leveling systems. The combination of suspension-control systems with other automotive **electronic systems** open perspectives for a further improvement of the overall vehicle dynamics. Measurements on prototype cars...

13/3,K/26 (Item 7 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

02054022 E.I. Monthly No: EI8612117638 E.I. Yearly No: EI86006990
Title: **CALCULATED CHEMISORPTION PROPERTIES OF ATOMS AND DIPOLES.**
Author: Holmstroem, Stefan
Corporate Source: Chalmers Univ of Technology, Goteborg, Swed
Source: Chalmers Tekniska Hogskola, Doktorsavhandlingar n 561 1986 37p
Publication Year: 1986
CODEN: DCTHAT ISSN: 0366-8746
Language: ENGLISH

...Abstract: method that self-consistently solves the Kohn-Sham equations for a localized perturbation in an **electronic system**. The metallic substrate is modelled by a semi-infinite jellium, and results are obtained for...

...energy, induced dipole moment, density of states and, in the case of a chemisorbed dipole, **vibrational damping** of the internal stretch mode.
(Edited author abstract) 81 refs.

13/3,K/27 (Item 8 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
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01833605 E.I. Monthly No: EI8512123337 E.I. Yearly No: EI85097928
Title: **IMPROVING THE EFFICIENCY OF RUPTURE-DISK SYSTEMS.**
Author: Beveridge, Hugh
Corporate Source: BS&B Safety Systems, Engl
Source: Process Engineering (London) v 66 n 1 Jan 1985 p 35,37
Publication Year: 1985
CODEN: PSEGAP ISSN: 0370-1859
Language: ENGLISH

...Abstract: can occur in practice. The author discusses some of these problems and describes a new **shock absorber /rupture- disk system** which reduces the risk of malfunction. (Edited author abstract)

13/3,K/28 (Item 9 from file: 8)
DIALOG(R)File 8:EI Compendex(R)
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01810022 E.I. Monthly No: EI8510086950 E.I. Yearly No: EI85015663
Title: **CONTROLLING RUNAWAY PRESSURE IN CHEMICAL PLANTS.**
Author: Beveridge, H. J. R.

Corporate Source: BS&B Safety Systems, London, Engl
Source: Chemsa v 11 n 2 Feb 1985 p 53-54
Publication Year: 1985
CODEN: CHEMDU ISSN: 0379-4687
Language: ENGLISH

...Abstract: can occur in practice. The author discusses some of these problems and describes a new **shock - absorber /rupture- disk system** which reduces the risk of malfunction. (Author abstract)

13/3,K/29 (Item 10 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
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01016917 E.I. Monthly No: EI8105043588 E.I. Yearly No: EI81076114
Title: Computer Modeling of Vibration - Resistance and Strength Design of Printed Electronic Units.
Title: MASHINNOE MODELIROVANIE DLYA RASCHETA NA VIBROUSTOICHIVOST' I PROCHNOST' KONSTRUKTSII PECHATNYKH UZLOV REA.
Author: Kofanov, Yu. N.; Kozhevnikov, A. M.; Chernushenko, A. M.
Source: Izvestiya Vysshikh Uchebnykh Zavedenii, Radioelektronika v 23 n 6 Jun 1980 p 74-77
Publication Year: 1980
CODEN: IVUZB5 ISSN: 0021-3470
Language: RUSSIAN

Title: Computer Modeling of Vibration - Resistance and Strength Design of Printed Electronic Units.

13/3,K/30 (Item 11 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2006 Elsevier Eng. Info. Inc. All rts. reserv.

00419785 E.I. Monthly No: EI7412080976
Title: UNIQUE SILICONE MATERIALS AND TECHNIQUES FOR MICRO AND MACRO ELECTRONIC PACKAGING.
Author: Smith, Schuyler B.
Corporate Source: Dow Corning Corp, Midland, Mich
Source: SAMPE Natl Symp and Exhib, 19th, Pap, Buena Park, Calif, Apr 23-25 1974 p 686-692. Publ by SAMPE Natl Bus Off (Vol 19), Azusa, Calif, 1974
Publication Year: 1974
Language: ENGLISH

...Abstract: silicone technology that have resulted in new and improved products for use in packaging airborne **electronic systems**. These products include gelatinous membranes for I. C. packaging, thermally conductive noncorrosive cements for power devices, conformal coatings for printed circuit arrays, flame retardant impregnants, and embedding compounds, **vibration damping** materials, optical bonding resins and controlled volatility sealants.

13/3,K/31 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01456709 ORDER NO: AADAA-I9602787
DYNAMIC INTERACTION BETWEEN THIN FILM BEARINGS AND VIBRATING STRUCTURES (LUBRICANT)
Author: WANG, YEN-KUN

Degree: PH.D.

Year: 1995

Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)

Source: VOLUME 56/09-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 5133. 93 PAGES

...the performance and productivity of mechanical systems. Fluid film bearings have been used extensively to damp vibration of vibrating structures. The present study experimentally and analytically investigates the effects of the lubricant supply and...

...thin film bearings for vibration control and stabilization of high speed band, tape and hard disk systems in the forest products and the computer industries.

The first contribution is the experimental measurement...

13/3,K/32 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

03221473 JICST ACCESSION NUMBER: 97A0620090 FILE SEGMENT: JICST-E
Selection of recent shock absorbers. Application of rotary damper.

Structure, selection and use application of rotary damper.

KACHO NOBUYOSHI (1)

(1) Fuji Seiki Co., Ltd.

Yukuatsu Gijutsu(Hydraulics & Pneumatics), 1997, VOL.36,NO.7, PAGE.9-14,
FIG.8, TBL.2

JOURNAL NUMBER: G0877ABT ISSN NO: 0914-6253

UNIVERSAL DECIMAL CLASSIFICATION: 621.8-567

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

...ABSTRACT: the standard of selection, and applications of a rotary damper which is a small rotary shock absorber using the viscous resistance of a fluid and smoothes motion such as the loading of a CD player. The rotary dampers in whcih a disc rotor integrated with a rotating shaft or vanes...

13/3,K/33 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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03066904 JICST ACCESSION NUMBER: 97A0153737 FILE SEGMENT: JICST-E
Properties and Applications of Transparent Heat Resistant Thermoplastics,
ARTON.

AOKI OSAMU (1)

(1) Jpn. Synth. Rubber Co., Ltd.

JSR Tekunikaru Rebyu(JSR Technical Review (Japan Synthetic Rubber), 1996,
NO.103, PAGE.46-54, FIG.10, TBL.3, REF.7

JOURNAL NUMBER: G0998ABV ISSN NO: 0916-7129

UNIVERSAL DECIMAL CLASSIFICATION: 678.5/.8 678.06

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

...ABSTRACT: high tensile strength. More application specific comparison proved that ARTON offers higher information density, better vibration resistivity, better durability, better moldability as the optical

disk; better focus aberration, better focus stability as...

...high fidelity CD, high density MO, next generation optical disks, pick-up lens for optical disk system, laser light collimation system, electronic parts, and optical film for LCD, optical fiber, etc. (author...

13/3,K/34 (Item 3 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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02270112 JICST ACCESSION NUMBER: 94A0966530 FILE SEGMENT: JICST-E
New product scramble report. Attractiveness of heavy sound by adoption of a new optical head mechanism. CDP-XA7ES of SONY.
OBARA YOSHIO (1)
Rajio Gijutsu, 1994, VOL.48,NO.12, PAGE.107-110, FIG.9
JOURNAL NUMBER: F0256AAA
UNIVERSAL DECIMAL CLASSIFICATION: 621.37:534.85
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Introduction article
MEDIA TYPE: Printed Publication

...ABSTRACT: paper introduces the highest end model, which costs 250,000 Yen, of the three new CD players. This machine adopts "optically fixed pickup mechanism" which was completely opposite to usual method in order to improve the vibration resistance of a laser pickup. In addition, this paper reports SONY's original "current pulse D...

13/3,K/35 (Item 4 from file: 94)
DIALOG(R)File 94:JICST-EPlus
(c)2006 Japan Science and Tech Corp(JST). All rts. reserv.

01901491 JICST ACCESSION NUMBER: 93A0934891 FILE SEGMENT: JICST-E
Development of Partially Earthquake-Resisting Equipment for Tall Buildings.
Take All Possible Measures Against Earthquakes!
Chubu Electric Power Co., Ltd.
Chubu Denryoku K.K. Gijutsu Kaihatsu Nyusu(Research and Development News.
Chubu Electric Power Co., Inc.), 1993, NO.58, PAGE.17-18, FIG.3
JOURNAL NUMBER: L1392AAG
UNIVERSAL DECIMAL CLASSIFICATION: 699.841/.842
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Introduction article
MEDIA TYPE: Printed Publication

...ABSTRACT: weak point of the system. Hence, we introduced partial earthquake resistance that covers only magnetic disk systems to maintain and improve the seismic resistance of the whole system in medium and small size buildings. In this context, we developed...

13/3,K/36 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2006 FIZ TECHNIK. All rts. reserv.

01125107 M97080028637
The tribo disk - A new tool for powder coating
(Tribo-Disk-System als neues Werkzeug fuer das Pulverspritzen)
Lambert, P
Nordson Corp., Amherst, USA

Metal Finishing, v95, n6, pp94-95, 97, 1997
Document type: journal article Language: English
Record type: Abstract
ISSN: 0026-0576

ABSTRACT:

...powder disk; tribo disk application to a wide variety of parts (retrofitting of a liquid disk system; coating of stapler parts; simple-to-operate powder coating systems for intricate electrical covers; interior coating of drums; coating of car roof rails, wiper blades, shock absorbers, and break pedals). Also in shelving and office furniture, the advantages of the tribo disk...

13/3,K/37 (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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00636393 E93013886005
Ein elektronisches System zur parameteradaptiven Regelung und Diagnose von Kraftfahrzeugstossdaempfern
(An electronic system for parameter adaptive control and diagnosis of vehicle shock absorber)
Busshardt, J; Fuehrer, J; Isermann, R
Elektronik im Kraftfahrzeug, Tagung, VDI-Gesellschaft Fahrzeugtechnik, Baden-Baden, D, 10.-11. September 1992 VDI-Berichte, v1009, n3, pp199-216, 1992
Document type: Conference paper Language: German
Record type: Abstract
ISBN: 3-18-091009-7
ISSN: 0083-5560

(An electronic system for parameter adaptive control and diagnosis of vehicle shock absorber)

13/3,K/38 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2006 The HW Wilson Co. All rts. reserv.

2073246 H.W. WILSON RECORD NUMBER: BAST93023283
Electronic control of the horizontal alignment of an optical bench
Carla, Marcello;
Measurement Science & Technology v. 4 (Apr. 1993) p. 473-5
DOCUMENT TYPE: Feature Article ISSN: 0957-0233

ABSTRACT: An electronic system to continuously control the horizontal alignment of a table top mounted on pneumatic damping legs is described. Table vibration damping is often required when using optical techniques to study a liquid-liquid or a liquid...

13/3,K/39 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

09656500
Pioneer refines car audio system
Philippines: Pioneer's car audio-visual system debuts
Manila Bulletin (XAZ) 07 Dec 2001 p.B-6
Language: ENGLISH

SDV-P7, the new DVD/VCD/ CD player for cars with optical digital output

by Pioneer made its debut in the Philippines recently. The anti-dust, heat and vibration resistant system is equipped with the Detachable Face Security head unit security technology. Other features of...

13/3,K/40 (Item 2 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

05142563
Shock-resistant portables precede MD units in market
US - SHOCK-RESISTANT CD PORTABLES TO BE LAUNCHED
Billboard (BBD) 13 June 1992 p9,73
ISSN: 0006-2510

Sony and Fisher will both be launching in June 1992 shock - resistant portable high-end CD player models. Both retailing at about USDlr500 Sony's Model D515 and Fisher's Walkabout both...

13/3,K/41 (Item 3 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

05002203
Superkompaakt CD-vaxlare for bilen
SWEDEN - PANASONIC LAUNCHES DP60 CD PLAYER
Rateko (RKO) 0 April 1992 p54
ISSN: 0033-9962
Language: Swedish

Panasonic will launch the DP60 car CD player which can take 6 CDs simultaneously. The unit is specially secured for bumps through the use of a shock absorbing mechanism and electronic vibration detection. The unit features MASH 1-bit technology. The small unit can be installed horizontally...

13/3,K/42 (Item 4 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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04210360
NEW CD-PLAYERS COMPARED BY WHICH?
UK - NEW CD-PLAYERS COMPARED BY WHICH?
Which? (WH) 0 April 1991 p204-207
ISSN: 0043-4841

Choosing a CD - player can be difficult due to the numerous products on offer. In a product survey, Which? reviews CD - players which have been launched recently and compares their features, such as track access, programming, repeat and displays. The review also looks at ease of use, shock resistance, error correction and target price. CD - players in the standard, multi-disc and portable categories are surveyed.

13/3,K/43 (Item 5 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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02788173
PCO INC PROFILE
US - PCO INC PROFILE

Defense Electronics (DFE) 0 July 1989 p65

... in 2 areas: basic opto-electronics research, and production of opto-electronic modules for military electronic systems. Many of PCO's products are hermetically sealed and offer a very high operating temperature range, high shock resistance, and excellent stability. Since no formal military specifications exist for opto-electronic devices, PCO's...

13/3,K/44 (Item 6 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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02516315
LUX LAUNCHES D-105U CD PLAYER
JAPAN - LUX LAUNCHES D-105U CD PLAYER
Journal of the Electronics Industry (JEI) 0 January 1989 p79
ISSN: 0385-4515

Lux has launched its D-105U, a compact disk player which features a triode vacuum tube. Weighing 6.6 kg it features 20-number random...

... coaxial digital output ports, and costs USD1r736. The machine has a rigid rack mechanism which resists external vibrations.

13/3,K/45 (Item 7 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
(c) 2002 The Gale Group. All rts. reserv.

01398278
SONY DEVELOPS OPTICAL VIDEO DISK PLAYER
JAPAN - SONY DEVELOPS OPTICAL VIDEO DISK PLAYER
Journal of the Electronics Industry (JEI) 0 October 1987 p81
ISSN: 0385-4515

Sony has developed an optical video disk player, LDP-1400, and shock - absorber, LSA-1500, enabling the player to be used in a vehicle. The LDP-1400, a...

13/3,K/46 (Item 1 from file: 483)
DIALOG(R)File 483:Newspaper Abs Daily
(c) 2006 ProQuest Info&Learning. All rts. reserv.

06148355 SUPPLIER NUMBER: 60217957
The Jukebox Comes Home
Marriott, Michel
New York Times, p 1
Sep 14, 2000
ISSN: 0362-4331 NEWSPAPER CODE: NYT
; Newspaper article
LANGUAGE: English RECORD TYPE: ABSTRACT

...ABSTRACT: a 17.3-gigabyte hard drive, and is about the size of a large multidisc CD player. It is designed primarily to copy songs from CD's (it can also copy from...

...and a headphone jack on its right side. But the device's resemblance to a CD player stops there. The Nomad Jukebox doesn't play CD's. What it does, once linked...

...cable, is store more than 100 hours of MP3 music files on its six-gigabyte, shock - resistant hard drive. It will list every CD loaded into a changer. Drawing upon PC technology...

13/3,K/47 (Item 2 from file: 483)
DIALOG(R)File 483:Newspaper Abs Daily
(c) 2006 ProQuest Info&Learning. All rts. reserv.

04710570

Mitsubishi's capable heavyweight Sport-utility has plenty of muscle, complemented by luxury touches

DeVault, Russ

Atlanta Journal Constitution, Sec R, p 35, col 1

Sep 13, 1997

NEWSPAPER CODE: ATCJ

DOCUMENT TYPE: Product Review-Favorable; Newspaper

LANGUAGE: English RECORD TYPE: ABSTRACT

LENGTH: Medium (6-18 col inches)

...ABSTRACT: Montero SR, given about \$6,000 worth of options, lacked little. Niceties ranged from two CD players ---a single-disc unit in the dash and a 10-disc changer mounted in the...

...height, the Montero SR isn't an ill-handling or hard-riding vehicle. The optional shock absorbers with hard, medium and soft settings make an appreciable difference in the comfort and performance...

File 344:Chinese Patents Abs Jan 1985-2006/Jan
 (c) 2006 European Patent Office
 File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)
 (c) 2006 JPO & JAPIO
 File 350:Derwent WPIX 1963-2006/UD,UM &UP=200643
 (c) 2006 The Thomson Corp.
 File 371:French Patents 1961-2002/BOPI 200209
 (c) 2002 INPI. All rts. reserv.

Set	Items	Description
S1	127045	(VIBRAT? OR SHOCK OR SEISMIC) (3N) (ABSORPTION OR ABSORB?? - OR DAMP? OR RESIST? OR CUSHION)
S2	36583	(ELECTRONIC() DEVICE?? OR UNIT?? OR SYSTEM?? OR APPARATUS) OR (CD OR DVD OR (DIGITAL() VERSATILE OR COMPACT) () DISC?? OR DISK??)) () (PLAYER?? OR UNITS OR SYSTEM??)
S3	1821417	RESIN?? OR POLYETHYLENE
S4	1411271	BUCKLE?? OR BUCKLING OR BEND?? OR MOMENT OR TOURQUE OR C-OMPRESS? OR DEFORM?
S5	717	AU=(KUWAJIMA, H? OR KUWAJIMA H?)
S6	134381	(CAPTUR? OR DIGITAL() VIDEO() STORAGE) (3N) DEVICE?? OR MEDIA
S7	289	S1(S) (S2 OR S6)
S8	6	S7(3N) (S3 OR S4)
S9	4	S8 NOT (VEHICLE OR EXCAVATOR??)
S10	0	S7 AND S5
S11	231	S5 AND IC=G11B?
S12	20	S11 AND S1
S13	2	S12(S) (S2:S4)
S14	2	S13 NOT S9
S15	18	S12 NOT AD=20030331/PR

9/3,K/1 (Item 1 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
 (c) 2006 The Thomson Corp. All rts. reserv.

016483414 **Image available**

WPI Acc No: 2004-641357/200462

XRPX Acc No: N04-507134

Shock absorber for rotary motor of optical disk player, uses damper and compression device to damp shock selectively depending on motor rotation speed

Patent Assignee: BENQ CORP (BENQ-N); CHAN S (CHAN-I); LIN C (LINC-I); LIN J (LINJ-I)

Inventor: CHAN S; LIN C; LIN J

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040163096	A1	20040819	US 2004777624	A	20040211	200462 B
TW 200416681	A	20040901	TW 2003103188	A	20030217	200624

Priority Applications (No Type Date): TW 2003103188 A 20030217

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 20040163096	A1	9	G11B-017/00
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TW 200416681	A		G11B-033/08
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Shock absorber for rotary motor of optical disk player, uses damper and compression device to damp shock selectively depending on motor rotation speed

9/3,K/2 (Item 2 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
 (c) 2006 The Thomson Corp. All rts. reserv.

013749827 **Image available**

WPI Acc No: 2001-234056/200124

XRPX Acc No: N01-167285

Vibration dampening mechanism, for use with data storage media drive canister, makes bend portion of cantilevered dampening spring to contact with bottom surface of canister support structure

Patent Assignee: LSI LOGIC CORP (LSIL-N)

Inventor: FLYNN T M; HARVEY R T

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6166900	A	20001226	US 97990930	A	19971215	200124 B

Priority Applications (No Type Date): US 97990930 A 19971215

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6166900	A	15		H05K-005/00	

Vibration dampening mechanism, for use with data storage media drive canister, makes bend portion of cantilevered dampening spring to contact with bottom surface of canister support structure

9/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

002265712

WPI Acc No: 1979-64916B/197936

Two-way deep well drill linkage shock absorber - has springs alternately active between compressed and extended tube and casing

Patent Assignee: CHRISTENSEN INC (CHRI-N)

Inventor: AUMANN J T; OSTERTAG A

Number of Countries: 004 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2906247	A	19790830				197936 B
GB 2015060	A	19790905				197936
FR 2417625	A	19791019				197948
US 4186569	A	19800205				198007
DE 2906247	B	19810212				198108
GB 2015060	B	19820630				198226

Priority Applications (No Type Date): US 78879237 A 19780221

...Abstract (Basic): a torsional moment transfer device, and fitted with spring media for impact modulation. The spring media, pref. in compression springs form, are alternately transferable for shock absorption, with the tubular unit and casing both...

9/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

002014070

WPI Acc No: 1978-27097A/197815

Curving of reinforced tubular rubber articles - without use of interiorly applied pressure medium, by longitudinal compression with consequent shortening

Patent Assignee: CONTINENTAL GUMMI WERKE AG (CONW)

Inventor: BERNITZ B

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 2643236	A	19780406			197815	B

Priority Applications (No Type Date): DE 2643236 A 19760925

...Abstract (Basic): pneumatic tyres, fittings, pneumatic shock absorber bellows, are curved, without recourse to interiorly applied pressure media, by compressing the article lengthwise; its length consequently being reduced during the curving operation...

14/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

017361970 **Image available**

WPI Acc No: 2005-685614/200571

XRPX Acc No: N05-562334

Head support apparatus for hard disk drive, has coil arm contacting crashing stops to control rotation of rotary shaft, such that flat contact surface of crashing stops are perpendicular or parallel to axial center of rotary shaft

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU)

Inventor: HASHI H; KUWAJIMA H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2005267717	A	20050929	JP 200476254	A	20040317	200571 B

Priority Applications (No Type Date): JP 200476254 A 20040317

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 2005267717 A 48 G11B-021/02

Abstract (Basic):

... Deformation of shock absorbing material of crashing stop due to thrust variation is restrained by simple structure. Thus improving ...

14/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

016587130 **Image available**

WPI Acc No: 2004-745865/200473

XRPX Acc No: N04-589089

Shock-absorbing unit for electronic device e.g. magnetic disk drive, has shock-absorbing base part to form bending part vertical to shock direction, and to start buckling at bending part so as to absorb shock when receiving impact

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI SANGYO KK (MATU)

Inventor: KUWAJIMA H

Number of Countries: 035 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040190193	A1	20040930	US 2004812993	A	20040331	200473 B
EP 1471534	A1	20041027	EP 20047845	A	20040331	200473
JP 2004315087	A	20041111	JP 200495204	A	20040329	200474
CN 1571065	A	20050126	CN 200459523	A	20040331	200530

Priority Applications (No Type Date): JP 200394953 A 20030331

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20040190193 A1 19 G11B-005/012

EP 1471534 A1 E G11B-033/08

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

JP 2004315087 A 16 B65D-081/107

CN 1571065 A G11B-033/08

... for electronic device e.g. magnetic disk drive, has shock-absorbing base part to form bending part vertical to shock direction, and to start buckling at bending part so as to absorb shock when receiving impact

Abstract (Basic):

... than a thickness of a shock-absorbing flexible part (18b). The base part forms a bending part vertical to the shock direction, and starts buckling at the bending part so as to absorb shock when receiving an impact. The base part and the flexible part are disposed so that...

... The shock-absorbing base part starts buckling at the bending part so as to absorb shock when receiving impact, thereby preventing main body of disk drive from receiving large shock, and...

15/3,K/1 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2006 JPO & JAPIO. All rts. reserv.

08026958 **Image available**

HEAD SUPPORTING DEVICE AND DISK DRIVE USING THE SAME

PUB. NO.: 2004-139717 [JP 2004139717 A]

PUBLISHED: May 13, 2004 (20040513)

INVENTOR(s): UENO YOSHIHIRO

KUWAJIMA HIDEKI

DEN SHISEI

APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD

APPL. NO.: 2003-331170 [JP 2003331170]

FILED: September 24, 2003 (20030924)

PRIORITY: 2002-283193 [JP 2002283193], JP (Japan), September 27, 2002 (20020927)

INVENTOR(s): UENO YOSHIHIRO

KUWAJIMA HIDEKI

DEN SHISEI

INTL CLASS: G11B-021/21

ABSTRACT

... while applying required sufficient load on a head, which is thin and which has high shock resistance, and to provide a disk drive using the head supporting device.

SOLUTION: The head supporting...

15/3,K/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2006 JPO & JAPIO. All rts. reserv.

07958378 **Image available**

HEAD SUPPORTING MECHANISM, HEAD DRIVING DEVICE, AND DISK DEVICE

PUB. NO.: 2004-071137 [JP 2004071137 A]

PUBLISHED: March 04, 2004 (20040304)
INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2003-163631 [JP 2003163631]
FILED: June 09, 2003 (20030609)
PRIORITY: 2002-169553 [JP 2002169553], JP (Japan), June 11, 2002
(20020611)

INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI
INTL CLASS: G11B-021/21

ABSTRACT

... device, and a disk device using the same which have high flexibility, are excellent in shock resistance, and are thin while giving necessary and sufficient pressing force to the head.

SOLUTION: The...

15/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

07958330 **Image available**
HEAD SUPPORT ARM, HEAD SUPPORT SYSTEM, AND DISK DEVICE

PUB. NO.: 2004-071089 [JP 2004071089 A]
PUBLISHED: March 04, 2004 (20040304)
INVENTOR(s): KUWAJIMA HIDEKI
UENO YOSHIHIRO
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2002-231381 [JP 2002231381]
FILED: August 08, 2002 (20020808)

INVENTOR(s): KUWAJIMA HIDEKI
UENO YOSHIHIRO
INTL CLASS: G11B-021/21

ABSTRACT

... mounted on a slider by external impacts, and a highly reliable disk device having high shock resistance and fast accessing.

SOLUTION: The head support device 16 is constructed in such a manner...

15/3,K/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

07958309 **Image available**
DISK UNIT AND HEAD SUPPORTING DEVICE

PUB. NO.: 2004-071068 [JP 2004071068 A]
PUBLISHED: March 04, 2004 (20040304)
INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2002-229745 [JP 2002229745]
FILED: August 07, 2002 (20020807)

INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI

INTL CLASS: G11B-021/12 ; G11B-021/22

ABSTRACT

... do not collide with each other even by an external shock and which have high shock resistance .

SOLUTION: The disk unit is composed of a disk 112 holding a recording medium, a...

15/3,K/5 (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

07958294 **Image available**
DISK DEVICE

PUB. NO.: 2004-071053 [JP 2004071053 A]
PUBLISHED: March 04, 2004 (20040304)
INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI
MIYAMOTO MAKOTO
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2002-228860 [JP 2002228860]
FILED: August 06, 2002 (20020806)

INVENTOR(s): UENO YOSHIHIRO
KUWAJIMA HIDEKI
MIYAMOTO MAKOTO
INTL CLASS: G11B-021/21 ; G11B-021/12 ; G11B-021/22

ABSTRACT

... BE SOLVED: To provide a disk device which has a head supporting device of high shock resistance and is capable of surely performing L/UL operation or CSS operation.

SOLUTION: The device...

15/3,K/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

07918087 **Image available**
HEAD SUPPORT UNIT AND DISK APPARATUS EMPLOYING THE SAME

PUB. NO.: 2004-030846 [JP 2004030846 A]
PUBLISHED: January 29, 2004 (20040129)
INVENTOR(s): MIYAMOTO MAKOTO
KUWAJIMA HIDEKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2002-189341 [JP 2002189341]
FILED: June 28, 2002 (20020628)

INVENTOR(s): MIYAMOTO MAKOTO
KUWAJIMA HIDEKI
INTL CLASS: G11B-021/21 ; G11B-021/02 ; G11B-021/12

ABSTRACT

... high flexibility within a region to support the head with a low profile and high shock resistance , and also to provide a disk apparatus employing the same.

SOLUTION: The disk apparatus is...

15/3,K/7 (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

07615490 **Image available**
HEAD SUPPORTING DEVICE AND DISK DRIVE UNIT USING THE SAME

PUB. NO.: 2003-109337 [JP 2003109337 A]
PUBLISHED: April 11, 2003 (20030411)
INVENTOR(s): MIYAMOTO MAKOTO
KUWAJIMA HIDEKI
SAKAMOTO KENICHI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2002-213411 [JP 2002213411]
FILED: July 23, 2002 (20020723)
PRIORITY: 2001-225910 [JP 2001225910], JP (Japan), July 26, 2001
(20010726)

INVENTOR(s): MIYAMOTO MAKOTO
KUWAJIMA HIDEKI
SAKAMOTO KENICHI
INTL CLASS: G11B-021/12 ; G11B-021/21 ; G11B-021/22

ABSTRACT

... SOLVED: To provide an L/UL (loading/unloading mechanism) type head supporting device having high shock resistance with a simple structure while reducing a load applied to a voice coil motor (VCM...)

15/3,K/8 (Item 8 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2006 JPO & JAPIO. All rts. reserv.

06056254 **Image available**
DYNAMIC VIBRATION REDUCER AND DISK STORAGE REGENERATING DEVICE USING DYNAMIC VIBRATION REDUCER

PUB. NO.: 10-339354 [JP 10339354 A]
PUBLISHED: December 22, 1998 (19981222)
INVENTOR(s): KUWAJIMA HIDEKI
OKAMOTO HIROTAKA
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 09-151191 [JP 97151191]
FILED: June 09, 1997 (19970609)

INVENTOR(s): KUWAJIMA HIDEKI
OKAMOTO HIROTAKA
INTL CLASS: F16F-015/08; G11B-033/08

ABSTRACT

PROBLEM TO BE SOLVED: To increase a frequency range of vibration for damping vibration with a simple structure by suppressing vibration of a frequency region lower than a resonance...

15/3,K/9 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 The Thomson Corp. All rts. reserv.

017361970 **Image available**

WPI Acc No: 2005-685614/200571

XRPX Acc No: N05-562334

Head support apparatus for hard disk drive, has coil arm contacting crashing stops to control rotation of rotary shaft, such that flat contact surface of crashing stops are perpendicular or parallel to axial center of rotary shaft

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU)

Inventor: HASHI H; KUWAJIMA H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2005267717	A	20050929	JP 200476254	A	20040317	200571 B

Priority Applications (No Type Date): JP 200476254 A 20040317

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2005267717	A	48		G11B-021/02	

...Inventor: KUWAJIMA H

Abstract (Basic):

... Deformation of shock absorbing material of crashing stop due to thrust variation is restrained by simple structure. Thus improving

...

International Patent Class (Main): G11B-021/02

International Patent Class (Additional): G11B-021/21

15/3,K/10 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

016731955 **Image available**

WPI Acc No: 2005-056231/200506

XRPX Acc No: N05-048812

Actuator gripping device for disk drive e.g. magnetic disk drive, has head support arm connected to pivot pedestal, where forces are applied to arm to move arm from shunt position to read and/or write position on recording medium

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI SANGYO KK (MATU); KITA H (KITA-I); KUWAJIMA H (KUWA-I); OBATA S (OBAT-I)

Inventor: KITA H; KUWAJIMA H ; OBATA S

Number of Countries: 036 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040240116	A1	20041202	US 2004856943	A	20040601	200506 B
EP 1484749	A1	20041208	EP 200412499	A	20040526	200506
JP 2005018965	A	20050120	JP 2004162889	A	20040601	200508
CN 1574035	A	20050202	CN 200446525	A	20040601	200532

Priority Applications (No Type Date): JP 2003156420 A 20030602

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040240116	A1	28		G11B-005/60	

EP 1484749 A1 E G11B-005/54

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR

JP 2005018965 A 25 G11B-021/12

CN 1574035 A G11B-021/22

...Inventor: KUWAJIMA H

Abstract (Basic):

... medium. The device thus prevents the medium from being damaged,

and hence assuring very high **shock resistance** , excellent response characteristic and reliable high-speed access...
International Patent Class (Main): **G11B-005/54** ...

... **G11B-005/60** ...

... **G11B-021/12** ...

... **G11B-021/22**

International Patent Class (Additional): **G11B-005/48** ...

... **G11B-021/02** ...

... **G11B-021/21**

15/3,K/11 (Item 3 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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016255257 **Image available**

WPI Acc No: 2004-413151/200439

Related WPI Acc No: 2002-601390; 2003-815046; 2003-815088

XRPX Acc No: N04-327848

Head support arm for disk drive e.g. optical disk drive, has read and write head connected to pivot pedestal, and arm pivotable about head arm pivot axis by thrusting force to levitate by record medium

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: KUWAJIMA H ; MIYAMOTO M; SAKAMOTO K

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1418573	A2	20040512	EP 20023370	A	20020213	200439 B
			EP 20042222	A	20020213	
EP 1418573	B1	20050615	EP 20023370	A	20020213	200540
			EP 20042222	A	20020213	
DE 60204700	E	20050721	DE 204700	A	20020213	200548
			EP 20042222	A	20020213	
DE 60204700	T2	20051201	DE 204700	A	20020213	200579
			EP 20042222	A	20020213	

Priority Applications (No Type Date): JP 2001203600 A 20010704; JP 200134916 A 20010213; JP 2001104108 A 20010403

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1418573	A2	E	27	G11B-005/48	Div ex application EP 20023370
					Div ex patent EP 1231598

Designated States (Regional): DE FR GB

EP 1418573	B1	E		G11B-005/48	Div ex application EP 20023370
					Div ex patent EP 1231598

Designated States (Regional): DE FR GB

DE 60204700	E			G11B-005/48	Based on patent EP 1418573
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DE 60204700	T2			G11B-005/48	Based on patent EP 1418573
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Inventor: KUWAJIMA H ...

Abstract (Basic):

... The head support arm provides high **resistance to shock** , high **responsivity** , high **resiliency** , and capability of making a high speed access even if a...

International Patent Class (Main): **G11B-005/48**

International Patent Class (Additional): **G11B-021/02**

15/3,K/12 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX
(c) 2006 The Thomson Corp. All rts. reserv.

016127597 **Image available**

WPI Acc No: 2004-285473/200427

XRPX Acc No: N04-226514

Head support device for recording and reproducing operation on recording medium e.g. magnetic disk, has base arm with vertical rotation supporting point, and head is arranged on surface opposing recording medium of head slider

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI SANGYO KK (MATU); DENG Z (DENG-I); KUWAJIMA H (KUWA-I); UENO Y (UENO-I)

Inventor: DENG Z; KUWAJIMA H ; UENO Y

Number of Countries: 034 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1406245	A2	20040407	EP 200321683	A	20030929	200427 B
JP 2004139717	A	20040513	JP 2003331170	A	20030924	200432
US 20040130824	A1	20040708	US 2003670366	A	20030926	200445
CN 1492436	A	20040428	CN 2003159852	A	20030926	200446

Priority Applications (No Type Date): JP 2002283193 A 20020927

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1406245 A2 E 38 G11B-005/48

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

JP 2004139717 A 31 G11B-021/21

US 20040130824 A1 G11B-005/48

CN 1492436 A G11B-021/21

...Inventor: KUWAJIMA H

Abstract (Basic):

... thereby ensuring high flexibility while applying an adequate load to the head, and assures excellent shock resistance .

International Patent Class (Main): G11B-005/48 ...

... G11B-021/21

International Patent Class (Additional): G11B-005/60

15/3,K/13 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

016000908 **Image available**

WPI Acc No: 2004-158758/200416

XRPX Acc No: N04-126871

Head supporting assembly for disk drive, has resilient member with one end connected to supporting arm and another end fixed to base arm to urge head supporting assembly towards disk

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI SANGYO KK (MATU); DENG Z (DENG-I); KUWAJIMA H (KUWA-I)

Inventor: DENG Z; KUWAJIMA H

Number of Countries: 034 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1388847	A1	20040211	EP 200317507	A	20030805	200416 B
JP 2004087101	A	20040318	JP 2003276859	A	20030718	200420
US 20040090711	A1	20040513	US 2003632860	A	20030804	200432
CN 1489147	A	20040414	CN 2003152672	A	20030805	200442
US 7068469	B2	20060627	US 2003632860	A	20030804	200643

Priority Applications (No Type Date): JP 2002229747 A 20020807

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
EP 1388847 A1 E 17 G11B-005/60

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

JP 2004087101 A 14 G11B-021/21
US 20040090711 A1 G11B-005/48
CN 1489147 A G11B-021/21
US 7068469 B2 G11B-005/48

...Inventor: KUWAJIMA H

Abstract (Basic):

... Secures and stabilizes shock resistance of disk drive...
International Patent Class (Main): G11B-005/48 ...

... G11B-005/60 ...

... G11B-021/21

International Patent Class (Additional): G11B-005/48

15/3, K/14 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015752886 **Image available**

WPI Acc No: 2003-815088/200377

Related WPI Acc No: 2002-601390; 2003-815046; 2004-413151

XRPX Acc No: N03-652391

Disk drive e.g. magnetic disk drive has support arm that is rotatable in radial direction about bearing unit, and in perpendicular direction to writing surface of disk about pivot pedestal

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: KUWAJIMA H ; MIYAMOTO M; SAKAMOTO K

Number of Countries: 024 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1351220	A2	20031008	EP 20023370	A	20020213	200377 B
			EP 200312631	A	20020213	
EP 1351220	B1	20050413	EP 20023370	A	20020213	200525
			EP 200312631	A	20020213	
DE 60203693	E	20050519	DE 203693	A	20020213	200535
			EP 200312631	A	20020213	
DE 60203693	T2	20050915	DE 203693	A	20020213	200560
			EP 200312631	A	20020213	

Priority Applications (No Type Date): JP 2001203600 A 20010704; JP 200134916 A 20010213; JP 2001104108 A 20010403

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1351220 A2 E 27 G11B-005/48 Div ex application EP 20023370
Div ex patent EP 1231598

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT SE TR

EP 1351220 B1 E G11B-005/48 Div ex application EP 20023370
Div ex patent EP 1231598

Designated States (Regional): DE FR GB

DE 60203693 E G11B-005/48 Based on patent EP 1351220
DE 60203693 T2 G11B-005/48 Based on patent EP 1351220

Inventor: KUWAJIMA H ...

Abstract (Basic):

... Improves shock resistance, responsivity and capability of high speed access. Also reduces undesired vibrations of the support arm

...
International Patent Class (Main): G11B-005/48
International Patent Class (Additional): G11B-021/12

15/3,K/15 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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015752844 **Image available**
WPI Acc No: 2003-815046/200377
Related WPI Acc No: 2002-601390; 2003-815088; 2004-413151
XRPX Acc No: N03-652354

Levitating-type head supporting device used for disk drive, changes amount of thrusting force provided by resilient structure to support arm which is rotatable in radial direction of disk

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU)

Inventor: KUWAJIMA H ; MIYAMOTO M; SAKAMOTO K

Number of Countries: 026 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1349151	A2	20031001	EP 20023370	A	20020213	200377 B
			EP 200312630	A	20020213	
EP 1349151	B1	20051228	EP 20023370	A	20020213	200605
			EP 200312630	A	20020213	
DE 60208330	E	20060202	DE 208330	A	20020213	200615
			EP 200312630	A	20020213	
DE 60208330	T2	20060629	DE 208330	A	20020213	200643
			EP 200312630	A	20020213	

Priority Applications (No Type Date): JP 2001203600 A 20010704; JP 200134916 A 20010213; JP 2001104108 A 20010403

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 1349151	A2	E	27 G11B-005/48	Div ex application EP 20023370
				Div ex patent EP 1231598

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
EP 1349151 B1 E G11B-005/48 Div ex application EP 20023370
Div ex patent EP 1231598

Designated States (Regional): DE FR GB
DE 60208330 E G11B-005/48 Based on patent EP 1349151
DE 60208330 T2 G11B-005/48 Based on patent EP 1349151

Inventor: KUWAJIMA H ...

Abstract (Basic):

... the support arm in radial direction of disk. Thus, disk drive small in size, highly resistant to shock, excellent in portability with high speed access and simple in structure, is achieved. Also by...
International Patent Class (Main): G11B-005/48
International Patent Class (Additional): G11B-021/02

15/3,K/16 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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014838912 **Image available**
WPI Acc No: 2002-659618/200271
XRPX Acc No: N02-521298

Disk drive e.g. magnetic disk drive for PDA, cellular phone, has housing of specified dimension for mounting head supporting device having plate

spring for moving support arm towards and away from recording medium
 Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI
 SANGYO KK (MATU); KUWAJIMA H (KUWA-I); MATSUOKA K (MATS-I); MIYAMOTO M
 (MIYA-I); OBATA S (OBAT-I); SAKAMOTO K (SAKA-I); SHINOHARA K (SHIN-I)
 Inventor: KUWAJIMA H ; MATSUOKA K; MIYAMOTO M; OBATA S; SAKAMOTO K;
 SHINOHARA K

Number of Countries: 029 Number of Patents: 011

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1239485	A2	20020911	EP 20024944	A	20020305	200271 B
US 20020145822	A1	20021010	US 200287420	A	20020301	200274
JP 2002260356	A	20020913	JP 200161300	A	20010306	200276
JP 2002334555	A	20021122	JP 2001136010	A	20010507	200307
CN 1374657	A	20021016	CN 2002106755	A	20020306	200311
JP 3395774	B2	20030414	JP 200161300	A	20010306	200328
US 20040233573	A1	20041125	US 200287420	A	20020301	200478
			US 2004872720	A	20040621	
US 6826018	B2	20041130	US 200287420	A	20020301	200479
EP 1239485	B1	20050622	EP 20024944	A	20020305	200541
DE 60204730	E	20050728	DE 204730	A	20020305	200551
			EP 20024944	A	20020305	
DE 60204730	T2	20051201	DE 204730	A	20020305	200579
			EP 20024944	A	20020305	

Priority Applications (No Type Date): JP 2001136010 A 20010507; JP
 200161300 A 20010306

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 1239485	A2	E	31	G11B-033/12	
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
 LI LT LU LV MC MK NL PT RO SE SI TR

US 20020145822	A1	G11B-017/00
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JP 2002260356	A	12 G11B-021/12
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JP 2002334555	A	11 G11B-025/04
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CN 1374657	A	G11B-021/16
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JP 3395774	B2	12 G11B-021/12	Previous Publ. patent JP 2002260356
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US 20040233573	A1	G11B-017/00	Cont of application US 200287420
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US 6826018	B2	G11B-021/22
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EP 1239485	B1	E G11B-033/12
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Designated States (Regional): DE FR GB

DE 60204730	E	G11B-033/12	Based on patent EP 1239485
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DE 60204730	T2	G11B-033/12	Based on patent EP 1239485
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Inventor: KUWAJIMA H ...

Abstract (Basic):

... The plate springs in the head supporting device facilitates the device to have increased resistance to shock and high rigidity. The housing and the head supporting device have reduced thickness. As a result the disk drive has superior resistance to shock and reduced thickness while eliminating the need for use of head retainer in the drive...

International Patent Class (Main): G11B-017/00 ...

... G11B-021/12 ...

... G11B-021/16 ...

... G11B-021/22 ...

... G11B-025/04 ...

... G11B-033/12

International Patent Class (Additional): G11B-005/48 ...

... G11B-005/73 ...

... G11B-005/82 ...

... G11B-019/20 ...

... G11B-021/02 ...

... G11B-021/20 ...

... G11B-021/21

15/3, K/17 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2006 The Thomson Corp. All rts. reserv.

014780684 **Image available**

WPI Acc No: 2002-601390/200265

Related WPI Acc No: 2003-815046; 2003-815088; 2004-413151

XRPX Acc No: N02-476747

Head supporting device in hard disk, has support arm that is provided with plate spring for imposing thrusting force towards recording media direction

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU); MATSUSHITA DENKI SANGYO KK (MATU); KUWAJIMA H (KUWA-I); MIYAMOTO M (MIYA-I); SAKAMOTO K (SAKA-I)

Inventor: KUWAJIMA H ; MIYAMOTO M; SAKAMOTO K

Number of Countries: 029 Number of Patents: 014

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 1231598	A2	20020814	EP 20023370	A	20020213	200265	B
US 20020126419	A1	20020912	US 200275565	A	20020213	200267	
JP 2002237160	A	20020823	JP 200134916	A	20010213	200271	
JP 2002298523	A	20021011	JP 2001104108	A	20010403	200281	
CN 1372264	A	20021002	CN 2002105059	A	20020211	200307	
JP 3374846	B2	20030210	JP 200134916	A	20010213	200314	
JP 3374849	B2	20030210	JP 2001104108	A	20010403	200314	
JP 2003022637	A	20030124	JP 2001203600	A	20010704	200318	
JP 3398736	B2	20030421	JP 2001203600	A	20010704	200328	
US 6751064	B2	20040615	US 200275565	A	20020213	200439	
CN 1495784	A	20040512	CN 2003101297	A	20020211	200452	
CN 1495785	A	20040512	CN 2003101296	A	20020211	200452	
EP 1231598	B1	20041124	EP 20023370	A	20020213	200477	
			EP 200312630	A	20020213		
			EP 200312631	A	20020213		
			EP 20042222	A	20020213		
DE 60202006	E	20041230	DE 202006	A	20020213	200502	
			EP 20023370	A	20020213		

Priority Applications (No Type Date): JP 2001203600 A 20010704; JP 200134916 A 20010213; JP 2001104108 A 20010403

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1231598 A2 E 28 G11B-005/48

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20020126419 A1 G11B-005/55

JP 2002237160 A 9 G11B-021/21

JP 2002298523 A 11 G11B-021/02

CN 1372264 A G11B-021/21

JP 3374846 B2 9 G11B-021/21 Previous Publ. patent JP 2002237160

JP 3374849 B2 10 G11B-021/21 Previous Publ. patent JP 2002298523

JP 2003022637 A 10 G11B-021/21
JP 3398736 B2 9 G11B-021/21 Previous Publ. patent JP 2003022637
US 6751064 B2 G11B-005/596
CN 1495784 A G11B-021/16
CN 1495785 A G11B-021/21
EP 1231598 B1 E G11B-005/48 Related to application EP 200312630
Related to application EP 200312631
Related to application EP 20042222
Related to patent EP 1349151
Related to patent EP 1351220
Related to patent EP 1418573

Designated States (Regional): DE FR GB
DE 60202006 E G11B-005/48 Based on patent EP 1231598
Inventor: KUWAJIMA H ...

Abstract (Basic):

... Facilitates an extremely high **resistance to shock**, high responsivity and capability of making high speed access, even if the shock is impressed...

International Patent Class (Main): G11B-005/48 ...

... G11B-005/55 ...

... G11B-005/596 ...

... G11B-021/02 ...

... G11B-021/16 ...

... G11B-021/21

International Patent Class (Additional): G11B-005/60

15/3, K/18 (Item 10 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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012220742 **Image available**

WPI Acc No: 1999-026848/199903

XRPX ACC NO: N99-020683

Dynamic damper for use in disk recording and reproduction apparatus - has holder securing weight in dynamic damper onto substrate via viscoelastic elements, damper damps vibrations in frequency range lower than resonance frequency determined by spring constant of viscoelastic elements and mass of weight

Patent Assignee: MATSUSHITA ELECTRIC IND CO LTD (MATU) ; MATSUSHITA DENKI SANGYO KK (MATU)

Inventor: KUWAJIMA H : OKAMOTO H

Number of Countries: 027 Number of Patents: 005

Number of claim

Patent Family								
Patent No	Kind	Date	Applicat No	Kind	Date	Week		
EP 884731	A2	19981216	EP 98110412	A	19980608	199903	B	
JP 10339354	A	19981222	JP 97151191	A	19970609	199910		
US 6178156	B1	20010123	US 9892401	A	19980605	200107		
EP 884731	B1	20020904	EP 98110412	A	19980608	200266		
DE 69807588	E	20021010	DE 607588	A	19980608	200274		
			EP 98110412	A	19980608			

Priority Applications (No Type Date): JP 97151191 A 19970609

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 884731 A2 E 15 G11B-033/08

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 10339354 A 8 F16F-015/08

US 6178156 B1 G11B-033/08

EP 884731 B1 E G11B-033/08

Designated States (Regional): DE FR GB
DE 69807588 E G11B-033/08 Based on patent EP 884731
... has holder securing weight in dynamic damper onto substrate via
viscoelastic elements, damper damps vibrations in frequency range
lower than resonance frequency determined by spring constant of
viscoelastic elements and...

Inventor: KUWAJIMA H ...

...Abstract (Basic): The damper is configured to damp vibration in a
frequency range lower than a resonance frequency determined by the
spring constant of...

...International Patent Class (Main): G11B-033/08

...International Patent Class (Additional): G11B-021/02

File 348:EUROPEAN PATENTS 1978-2006/ 200627

(c) 2006 European Patent Office

File 349:PCT FULLTEXT 1979-2006/UB=20060706,UT=20060629

(c) 2006 WIPO/Univentio

Set	Items	Description
S1	35146	(VIBRAT? OR SHOCK OR SEISMIC) (3N) (ABSORPTION OR ABSORB?? - OR DAMP? OR RESIST? OR CUSHION)
S2	27730	(ELECTRONIC() (DEVICE?? OR UNIT?? OR SYSTEM?? OR APPARATUS) OR (CD OR DVD OR (DIGITAL() VERSATILE OR COMPACT) ()DISC?? OR D-ISK??)) () (PLAYER?? OR UNITS OR SYSTEM??)
S3	447191	RESIN?? OR POLYETHYLENE
S4	732180	BUCKLE?? OR BUCKLING OR BEND?? OR MOMENT OR TOURQUE OR C-OMPRESS? OR DEFORM?
S5	57	AU=(KUWAJIMA, H? OR KUWAJIMA H?)
S6	250153	(CAPTUR? OR DIGITAL()VIDEO()STORAGE) (3N)DEVICE?? OR MEDIA
S7	292	S1(S) (S2 OR S6)
S8	60	S7(S) (S3 OR S4)
S9	8	S8 AND IC=G11B?
S10	0	S8 AND S5
S11	13	S1 AND S5
S12	3	S11(S) (S2:S4)
S13	3	S12 NOT S9

9/3,K/1 (Item 1 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

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01688821

Single reel tape cartridge with tape cartridge leader

Einspulenbandkassette mit Bandkassettenfuhrungsvorrichtung

Cassette a bande a bobine unique avec dispositif d'enfilage de bande de cassette

PATENT ASSIGNEE:

QUANTUM CORPORATION, (567673), 501 Sycamore Drive, Milpitas, CA 95035,
(US), (Applicant designated States: all)

INVENTOR:

Kuhar, James J., 267 Greenway Circle Way, Broomfield Colorado 80020, (US)
Stamm, Stephen, 800 South Hoover Avenue, Fort Lupton Colorado 80621, (US)

LEGAL REPRESENTATIVE:

Charig, Raymond Julian et al (79692), Eric Potter Clarkson, Park View
House, 58 The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 1385168 A2 040128 (Basic)

APPLICATION (CC, No, Date): EP 2003254368 030710;

PRIORITY (CC, No, Date): US 202661 020723

DESIGNATED STATES: AT; BE; BG; CH; CY; DE; DK; EE; ES; FI; FR; GB; GR;
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS (V7): G11B-023/107 ; G11B-023/26

ABSTRACT WORD COUNT: 148

NOTE:

Figure number on first page: 3a

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200405	1011
SPEC A	(English)	200405	4718
Total word count - document A			5729
Total word count - document B			0
Total word count - documents A + B			5729

INTERNATIONAL PATENT CLASS (V7): G11B-023/107 ...

... G11B-023/26

...SPECIFICATION the life of the leader 200 during normal operation, the leader stop 300 includes a shock absorbing material, namely bumpers 302 and 304. The bumpers, 302 and 304, are disposed in the...

...failure of the ears 214 and 216. Operationally, when the cartridge leader 200 is again buckled with the take-up leader 120, the take-up leader 120 spools the cartridge leader 200 and tape media 116 off of the hook member 306 in the direction (A) and onto the take-up reel 108. In this regard, the cartridge leader 200 and tape media 116 are pulled over the top of the hook member 306 out of the cartridge...

9/3,K/2 (Item 2 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.

01430040

Dynamic vibration absorber for a disk player
Dynamischer Schwingungsdampfer fur Platteneinheit
Amortisseur de vibrations dynamique pour unite a disque
PATENT ASSIGNEE:

SAMSUNG ELECTRONICS CO. LTD., (1093723), 416 Maetan-dong, Kwonsun-ku,
Suwon, Kyunggi-do, (KR), (Applicant designated States: all)

INVENTOR:

Park, Jun-min, 35-210 Jukong Apartment, Gaepo-1-dong, Kangnam-gu, Seoul,
(KR)

Lee, Young-won, 651-1607 Sinnamooshil Mijoo Apt, Youngtong-dong,
Paldal-gu, Suwon-city, Kyungki-do, (KR)

Seo, Young-sun, 208-806, LG Apt., Moojigae Maeul, Gumi-dong, Bundang-gu,
Sungnam-city, Kyungki-do, (KR)

LEGAL REPRESENTATIVE:

Robinson, Ian Michael (79162), Appleyard Lees, 15 Clare Road, Halifax HX1
2HY, (GB)

PATENT (CC, No, Kind, Date): EP 1207532 A2 020522 (Basic)
EP 1207532 A3 030122

APPLICATION (CC, No, Date): EP 2001309162 011029;

PRIORITY (CC, No, Date): KR 2067766 001115

DESIGNATED STATES: DE; GB; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): G11B-033/08

ABSTRACT WORD COUNT: 68

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200221	1448
SPEC A	(English)	200221	4283
Total word count - document A			5731
Total word count - document B			0
Total word count - documents A + B			5731

INTERNATIONAL PATENT CLASS (V7): G11B-033/08

...SPECIFICATION in detail using FIGS. 7-10.

Figures 7 and 8 show the vibration feature of disk players with and without the dynamic vibration absorber of the present invention.

Figure 7 is a graph measuring the frequency of a deformed wobble disk which has an RPM that increases from 0 to 10000 using the spindle...

...the deck plate 20. As shown in Figure 7, comparison example A1 lacks the dynamic vibration absorber and generates resonance around 60Hz with no influence of the deck plate 20 and the optical pickup 55. On the other hand, in experimental example A2, which has the dynamic vibration absorber, the resonance has been largely reduced around 60Hz. In other words, by a repeated reciprocal...

9/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.

00937326

Method of changing rotational rate of storage medium from initial rate to desired rate
Verfahren zur Änderung der Drehgeschwindigkeit eines Speichertragers von einer Anfangsgeschwindigkeit auf eine gewünschte Geschwindigkeit
Methode de changement de vitesse de rotation d'un support d'informations d'une vitesse initiale à une vitesse désirée

PATENT ASSIGNEE:

DISCOVISION ASSOCIATES, (260273), 2355 Main Street Suite 200, Irvine, CA 92714, (US), (Proprietor designated states: all)

INVENTOR:

Crupper, Randolph Scott, 308 High street, PO Box 731, Palmer Lake, Colorado 80133, (US)

Davis, Marvin Benjamin, 2813 Palmer Park Blvd., Colorado Springs, Colorado 80909, (US)

Getreuer, Kurt Walter, 115 Golden Hills Rd., Colorado Springs, Colorado 80919, (US)

Grassens, Leonardus Johannes, 19115 Pebble Beach Way, Monument, Colorado 80132, (US)

Lewis, David Earl, 14280 Spiritwood Loop, Black Forest, Colorado 80106, (US)

Schell, Davis Lewis, 5307 Borrego Drive, Colorado Springs, Colorado 80918, (US)

LEGAL REPRESENTATIVE:

Bazzichelli, Alfredo et al (40161), c/o Societa Italiana Brevetti S.p.A. Piazza di Pietra, 39, 00186 Roma, (IT)

PATENT (CC, No, Kind, Date): EP 852379 A2 980708 (Basic)
EP 852379 A3 000202
EP 852379 B1 031029

APPLICATION (CC, No, Date): EP 98101056 960118;

PRIORITY (CC, No, Date): US 376882 950125

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IE; IT; LI; NL; PT; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 726564 (EP 96300350)

INTERNATIONAL PATENT CLASS (V7): G11B-019/26 ; G11B-019/28

ABSTRACT WORD COUNT: 107

NOTE:

Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199828	663
CLAIMS B	(English)	200344	618
CLAIMS B	(German)	200344	536
CLAIMS B	(French)	200344	674
SPEC A	(English)	199828	88273
SPEC B	(English)	200344	88916
Total word count - document A			88950
Total word count - document B			90744

Total word count - documents A + B 179694

INTERNATIONAL PATENT CLASS (V7): G11B-019/26 ...

... G11B-019/28

...SPECIFICATION providing mechanical isolation of the drive component. In this embodiment, the first means is a **shock absorbing** bumper and may be provided with at least one **compression** rib, and second means includes a housing that may be adapted to fit to an...

...group consisting of silicon rubber, polyurethane, and injection molded plastics. The first means also provides **shock absorption** and mechanical isolation in the form of the crash stop adapted to prevent a moveable...that the actuator 2-10 of the present invention could also be incorporated in optical **systems** having different orientations than those illustrated.

Focus Sensing Apparatus

Fig. 36 is a block diagrammatic...

9/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00795769

Optical information recording medium

Optisches Informationsaufzeichnungsmedium

Support d'enregistrement d'information optique

PATENT ASSIGNEE:

TAIYO YUDEN CO., LTD., (434452), 16-20, Ueno 6-chome, Taito-ku Tokyo 110,
(JP), (Proprietor designated states: all)

INVENTOR:

Hamada, Emiko, c/o Taiyo Yuden Co., Ltd., 16-20, Ueno 6-chome, Taito-ku,
Tokyo, (JP)

Arai, Yuji, c/o Taiyo Yuden Co., Ltd., 16-20, Ueno 6-chome, Taito-ku,
Tokyo, (JP)

Shin, Yuaki, c/o Taiyo Yuden Co., Ltd., 16-20, Ueno 6-chome, Taito-ku,
Tokyo, (JP)

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LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 741383 A2 961106 (Basic)
EP 741383 A3 961120
EP 741383 B1 020703

APPLICATION (CC, No, Date): EP 96112240 890417;

PRIORITY (CC, No, Date): JP 88191715 880730; JP 88191716 880730; JP 897511
890114

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

RELATED PARENT NUMBER(S) - PN (AN):

EP 353391 (EP 89106809)

INTERNATIONAL PATENT CLASS (V7): G11B-007/00 ; G11B-007/24

ABSTRACT WORD COUNT: 212

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	234

CLAIMS B (English)	200227	215
CLAIMS B (German)	200227	206
CLAIMS B (French)	200227	240
SPEC A (English)	EPAB96	3168
SPEC B (English)	200227	3080
Total word count - document A		3403
Total word count - document B		3741
Total word count - documents A + B		7144

INTERNATIONAL PATENT CLASS (V7): G11B-007/00 ...

... G11B-007/24

...SPECIFICATION same as in Example 2.

In conventional information recording media, it is common that a **shock absorbing** portion such as a space is formed behind the information recordable layer so that when...

...recording layer absorbs a laser beam and generates heat and is thereby melted, evaporated, sublimed, deformed or modified, such thermal changes are **absorbed** by the above **shock absorbing** portion, whereby pits are formed to the recording layer itself. Whereas, the optical information recording...

...by forming the layers behind the light absorptive layer 2 with materials more hardly heat- deformable than the substrate 1, it is possible to employ a recording system wherein the thermal...

...SPECIFICATION recordable regions 7, were substantially the same as in Example 2.

In conventional information recording **media**, it is common that a **shock absorbing** portion such as a space is formed behind the information recordable layer so that when...

...recording layer absorbs a laser beam and generates heat and is thereby melted, evaporated, sublimed, deformed or modified, such thermal changes are **absorbed** by the above **shock absorbing** portion, whereby pits are formed to the recording layer itself. Whereas, the optical information recording...

...by forming the layers behind the light absorptive layer 2 with materials more hardly heat- deformable than the substrate 1, it is possible to employ a recording system wherein the thermal...

9/3,K/5 (Item 5 from file: 348)
 DIALOG(R) File 348:EUROPEAN PATENTS
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00341064

Optical information recording medium

Optisches Informationsaufzeichnungsmedium

Milieu optique d'enregistrement d'information

PATENT ASSIGNEE:

TAIYO YUDEN CO., LTD., (434452), 16-20, Ueno 6-chome, Taito-ku Tokyo 110,
 (JP), (applicant designated states:
 AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;NL;SE)

INVENTOR:

Hamada, Emiko, Taiyo Yuden Co., Ltd 16-20, Ueno 6-chome, Taito-ku Tokyo,
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Arai, Yuji, Taiyo Yuden Co., Ltd 16-20, Ueno 6-chome, Taito-ku Tokyo,
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LEGAL REPRESENTATIVE:
Wachtershauser, Gunter, Prof. Dr. (12711), Patentanwalt, Tal 29, 80331
Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 353393 A2 900207 (Basic)
EP 353393 A3 901003
EP 353393 B1 950719
APPLICATION (CC, No, Date): EP 89106811 890417;
PRIORITY (CC, No, Date): JP 19171488 880730; JP 21447088 880829; JP
23845688 880922; JP 23916388 880924; JP 23916488 880924; JP 23916688
880924; JP 23916788 880924
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS (V7): G11B-007/00
ABSTRACT WORD COUNT: 110

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9929	368
CLAIMS B	(German)	9929	291
CLAIMS B	(French)	9929	404
SPEC B	(English)	9929	17655
Total word count - document A			0
Total word count - document B			18718
Total word count - documents A + B			18718

INTERNATIONAL PATENT CLASS (V7): G11B-007/00

...SPECIFICATION ultraviolet curable resin was spin-coated and cured by
irradiation with ultraviolet rays to form a protective layer 4 having
a thickness of 10 (μ m).
To the optical disc thus obtained...

...recorded in the same manner as in Example 1. Then, this optical disc was
played back by the same CD player as used in Example 1, whereby the
reflectance of the optical disc was $75\% \times (I_{111})/I_{top}$ was 0.65, and
 $13\% \times (I_{13})/I_{top}$ was...

...butylindodicarbocyanine perchlorate as a cyanine dye dissolved in 10
m(liters) of a methyl isobutyl ketonesolvent, was coated by spin
coating to form a light absorptive layer 2 having a thickness...

9/3,K/6 (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2006 European Patent Office. All rts. reserv.

00341062
Optical information recording medium
Optisches Informationsaufzeichnungsmedium
Milieu optique d'enregistrement d'information
PATENT ASSIGNEE:
TAIYO YUDEN CO., LTD., (434452), 16-20, Ueno 6-chome, Taito-ku Tokyo 110,
(JP), (applicant designated states:
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;NL;SE)

INVENTOR:
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LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 353391 A2 900207 (Basic)

EP 353391 A3 900808

EP 353391 B1 970205

APPLICATION (CC, No, Date): EP 89106809 890417;

PRIORITY (CC, No, Date): JP 88191715 880730; JP 88191716 880730; JP 897511
890114

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS (V7): G11B-007/00 ; G11B-007/24

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	319
CLAIMS B	(English)	EPAB97	335
CLAIMS B	(German)	EPAB97	285
CLAIMS B	(French)	EPAB97	363
SPEC A	(English)	EPABF1	3182
SPEC B	(English)	EPAB97	3185
Total word count - document A			3501
Total word count - document B			4168
Total word count - documents A + B			7669

INTERNATIONAL PATENT CLASS (V7): G11B-007/00 ...

... G11B-007/24

...SPECIFICATION same as in Example 2.

In conventional information recording media, it is common that a **shock absorbing** portion such as a space is formed behind the information recordable layer so that when...

...recording layer absorbs a laser beam and generates heat and is thereby melted, evaporated, sublimed, **deformed** or modified, such thermal changes are **absorbed** by the above **shock absorbing** portion, whereby pits are formed to the recording layer itself. Whereas, the optical information recording...

...by forming the layers behind the light absorptive layer 2 with materials more hardly heat- **deformable** than the substrate 1, it is possible to employ a recording system wherein the thermal...

...SPECIFICATION recordable regions 7, were substantially the same as in Example 2.

In conventional information recording **media**, it is common that a **shock absorbing** portion such as a space is formed behind the information recordable layer so that when...

...recording layer absorbs a laser beam and generates heat and is thereby melted, evaporated, sublimed, **deformed** or modified, such thermal changes are **absorbed** by the above **shock absorbing** portion, whereby pits are formed to the recording layer itself. Whereas, the optical information recording...

...by forming the layers behind the light absorptive layer 2 with materials more hardly heat- **deformable** than the substrate 1, it is possible to employ a recording system wherein the thermal...

9/3,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00270214

Carriage latch for a disc drive.

Schlittenverriegelung fur ein Plattenlaufwerk.

Verrouillage de chariot pour un entrainement de disque.

PATENT ASSIGNEE:

SEAGATE TECHNOLOGY, INC., (506203), 920 Disc Drive, Scotts Valley
California 95066, (US), (applicant designated states:
AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

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Jue, Clifford T., 111 Ponderosa Court, Santa Cruz California 95060, (US)
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Bayliss, Geoffrey Cyril et al (28151), BOULT, WADE & TENNANT 27 Furnival
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PATENT (CC, No, Kind, Date): EP 259127 A2 880309 (Basic)
EP 259127 A3 890315
EP 259127 B1 900502

APPLICATION (CC, No, Date): EP 87307676 870828;

PRIORITY (CC, No, Date): US 901678 860829

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS (V7): G11B-005/54 ; G11B-021/08 ; G11B-021/22
; G11B-021/02 ; G11B-005/40

ABSTRACT WORD COUNT: 167

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPABF1	651
SPEC B	(English)	EPABF1	2004
Total word count - document A			0
Total word count - document B			2655
Total word count - documents A + B			2655

INTERNATIONAL PATENT CLASS (V7): G11B-005/54 ...

... G11B-021/08 ...

... G11B-021/22 ...

... G11B-021/02 ...

... G11B-005/40

... CLAIMS a signal to withdraw said plunger from said first position to
said second position, and **shock absorbing** means comprising a
counterweight mechanically linked to said plunger for **absorbing** a
shock applied to said frame and pointing movement of said plunger
away from said first position in the absence of actuation of said
solenoid,

the mass **moment** of said counterweight being substantially
equal to the mass **moment** of said plunger about a pivot, whereby
shock loads fixed to said frame applied to...

9/3,K/8 (Item 8 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00242196

Magneto-optical recording medium.

Magneto-optischer Aufzeichnungsträger.

Support d'enregistrement magneto-optique.

PATENT ASSIGNEE:

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INVENTOR:

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Sato, Tetsuo, Kopo Yamato 201 2-5-8, Sakae-cho, Hino-shi Tokyo, (JP)

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PATENT (CC, No, Kind, Date): EP 245833 A2 871119 (Basic)
EP 245833 A3 881214
EP 245833 B1 911009

APPLICATION (CC, No, Date): EP 87106848 870512;

PRIORITY (CC, No, Date): JP 86108663 860514; JP 86308520 861226

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS (V7): G11B-011/10

ABSTRACT WORD COUNT: 44

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	252
CLAIMS B	(German)	EPBBF1	236
CLAIMS B	(French)	EPBBF1	263
SPEC B	(English)	EPBBF1	5718
Total word count - document A			0
Total word count - document B			6469
Total word count - documents A + B			6469

INTERNATIONAL PATENT CLASS (V7): G11B-011/10

...SPECIFICATION less is more preferable, since the light absorption
thereof is 5% or less.

The recording media according to the present invention, i.e., the
In/Sn-oxide recording medium and the...

...Ti recording medium are now described with regard to the magneto-optical
layer, the synthetic resin - or plastic-substrate, the layer protecting
a magneto-optical recording layer on the side thereof...

13/3,K/1 (Item 1 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01801781

Shock-absorbing member, shock-absorbing method of electronic device
employing the member and electronic device adapting the member and the
method

Stossdampfendes Element, Stossdampfendes Verfahren fur eine elektronische
Vorrichtung welches dieses Element benutzt, und fur dieses Element und
dieses Verfahren angepasste elektronische Vorrichtung

Element d'absorption de chocs, procede d'absorption de chocs de dispositif
electronique utilisant l'element, et dispositif electronique adapte a
cet element a et ce procede

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza-Kadoma,
Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all)
INVENTOR:

Kuwajima, Hideki, 36-3, Shimobetto-cho Kitashirakawa Sakyo-ku, Kyoto-shi
Kyoto 606-8286, (JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1471534 A1 041027 (Basic)

APPLICATION (CC, No, Date): EP 2004007845 040331;

PRIORITY (CC, No, Date): JP 200394953 030331

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS (V7): G11B-033/08

ABSTRACT WORD COUNT: 160

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200444	1004
SPEC A	(English)	200444	6763
Total word count - document A			7767
Total word count - document B			0
Total word count - documents A + B			7767

...ABSTRACT A1

Shock - absorbing member 18, a shock - absorbing method and an electronic device employing the member are disclosed, wherein the shock - absorbing member prevents electronic equipment main body from receiving a large shock and avoids a fatal...

...subjected to substantially a large impact of dropping of the equipment for instance. More specifically, shock absorbing member 18 is formed by integrally molding shock - absorbing base part 18a of resin material having a flexibility but having a certain degree of hardness and formed into a thin plate, and highly soft shock - absorbing base part 18a having a cushion capability, into a unit having a certain degree of thickness, wherein shock - absorbing base part 18a is thinner than shock - absorbing flexible part 18b, wherein shock - absorbing base part 18a bends when receiving an impact, and start absorbing the shock by buckling at a bending part thereof. Shock - absorbing member 18 is disposed on and fixed to electronic equipment main body, constituting the invention.

...SPECIFICATION 10 (b) shows another example of the vibration-isolating mechanism, in which a plurality of shock - absorbing members which absorbs vibration and impact are placed between a disk drive and a case covering a disc drive container of the electronic equipment. In Fig. 10 (b), 3 pieces each of soft first- shock - absorbing divided into a small piece are affixed to sheet member 141 which is bonded to...

...of the face of sheet member 141 facing the case (not illustrated), and then second- shock absorbing member 412 which is harder than first- shock - absorbing -member 411 is placed between first- shock - absorbing -members 411. A thickness of newly attached shock - absorbing member 412 is set almost equal to a thickness where first- shock - absorbing member 411 loses its shock - absorbing effect compressed by an impact force. When a weak impact is applied, only soft first- shock - absorbing member 411 absorbs the shock , and when a strong impact is applied, hard second- shock - absorbing member 412 provided with an additional shock absorbing capability absorbs a shock which soft shock -

absorbing -member 411 is unable to absorb with its capability, therewith two stages absorption construction is established. In this example, both of the **shock - absorbing** members absorb respective shock by elastically deforming . It is therefore assumed that this construction effectively responds to a wide range of impact from a weak impact to a strong impact.

However, with the above conventional **shock - absorbing** member and **shock - absorbing** method, when **shock - absorbing** member 62 made of a single material as shown in Fig. 9 is used, and...

...dropping impact for instance reaching 10,000G or higher is applied, a thickness of every **shock - absorbing** member 62 has to be large enough for efficiently alleviating the impact and protecting electronic device main body 61 from fatal damage. Notwithstanding, if the thickness of **shock - absorbing** member 62 is increased, although **shock - absorbing** capability of **shock - absorbing** member 62 becomes high enough at an initial stage of receiving an impact, deformation of **shock - absorbing** member 62 is rapidly progressed and resilient restoring power of **shock - absorbing** member 62 rapidly progresses, and as a result, the **shock - absorbing** capability is swiftly decreased and the **shock - absorbing** capability of the member is dropped, causing the device subjected to a great shock in...

...a task is left. There also is another problem left that increasing the thickness of **shock - absorbing** member 62 makes the size of electronic device 72 larger, making it hard for the device to realize further miniaturization.

The problem of above mentioned single material **shock - absorbing** member remains in a constitution in which a plurality of **shock - absorbing** members are combined and used, i.e., even if a plurality of **shock - absorbing** member having a different temperature characteristic are combined and used as in Fig 10 (a), because the problem is irrelevant to temperature. Namely, even if the thickness of the **shock - absorbing** member is increased against a large dropping impact amounting to 10,000G or above, although the **shock - absorbing** capability becomes high at the initial stage of receiving the impact, the **shock - absorbing** member is rapidly deformed , and loses its resiliency restoring capability therefore a **shock - absorbing** capability of the member is lowered, as a result, the device is subjected to receiving...

...been difficult for them to cope with a very large impact. If the soft first **shock - absorbing** member and the second **shock - absorbing** member that is harder than the first member are combined and used as in case...

...it may be considered that the united member is more effective than the single member **shock - absorbing** member in alleviating the impact. However, if substantially a large dropping impact reaching 10,000G or above is applied, even if the hard second- **shock - absorbing** -member is used, as long as it is used for absorbing the shock only with its elasticity deforming resistivity, it has to be assumed that it will be difficult for the united member...

...a large impact by dropping or the like.

In order to achieve above objective, the **shock - absorbing** member in the present invention, which is placed around the main body of the device, is composed of a **shock - absorbing** base part and a **shock - absorbing** flexible part, and in which the **shock - absorbing** base part is made thinner than the **shock - absorbing** flexible part. When the **shock - absorbing** base receives a **shock** , the base part first starts bending by absorbing the **shock** , in this case the **shock - absorbing** base part forms a bending part which is vertical to the **shock** direction, and starts buckling at the bending part of the **shock -**

absorbing base part so as to absorb a shock when receiving an impact. The member is so constituted that longer sides of the shock - absorbing base part and the shock - absorbing flexible part are directed substantially in parallel with a direction in which an impact force is applied, that the shock - absorbing base part and the shock - absorbing flexible part are integrally composed forming a unit, that the shock - absorbing base part is narrower in its effective width of the bending part in vertical to the direction of the length, that the shock - absorbing base part is thinner in a direction of its effective thickness which is vertical to long side of the shock - absorbing base part, and that the shock - absorbing base part is harder than the shock - absorbing flexible part.

With these constitutions, the shock - absorbing member is constituted as to endure a compressional force of impact for comparatively a longer period of time, to display its shock - absorbing capability fully when receiving a very large shock such as of dropping of the device in portable use. Used in electronic equipment, the shock - absorbing member prevents a main body of the equipment from being applied a large impact force and avoids a fatal damage to the equipment.

In order to achieve above objective, the shock - absorbing method of electronic devices of this invention includes, in the shock - absorbing method of the electronic device utilizing the shock absorbing member made by integrally molding the shock - absorbing base part and the shock - absorbing flexible part, a process of making the shock - absorbing member to start buckling at its bending part, as well as the process of making the thickness of the shock - absorbing base part smaller than that of the shock - absorbing flexible part thereby having the shock - absorbing base part to absorb the shock first by bending when receiving an impact. The method thereby includes a process having the shock - absorbing flexible part to mainly absorb the shock after the shock - absorbing base part is buckled at a bending part which is vertical to the shock direction so as to absorb the shock. With these processes, the obtained shock - absorbing method enables the electronic device to sustain a compressional force for comparatively a long time when receiving a large impact at its portable use, thereby preventing the electronic device from receiving a fatal damage.

In addition to above, the shock - absorbing method of the electronic device of this invention includes a process, in which a joint plane of the shock - absorbing base part and the shock - absorbing flexible part of the shock - absorbing members placed adjacent to a plane to which a main body of a device and...

...at least and 120(degree) at most. With this process, much preferable disposition of the shock - absorbing member is realized so that the shock - absorbing member receiving a shock buckles in near center of the shock - absorbing base part, making it possible for the shock - absorbing method sufficiently to display the shock - absorbing characteristic.

In order to achieve the objective of this invention, the electronic device of the present invention further includes following constitutions. In the shock - absorbing member which is placed outside of the main body of the device and which is composed of the shock - absorbing base part and shock - absorbing flexible part, the thickness of the shock - absorbing base part is thinner than that of the shock - absorbing flexible part; the bending of the shock - absorbing part of the shock - absorbing base part is followed by buckling of the part; the longer sides of the shock - absorbing member of the shock - absorbing base part and the shock - absorbing flexible part are directed substantially in parallel with a direction in which the impact force is applied. The shock - absorbing member used here is made by integrally molding the shock - absorbing base part and the shock - absorbing flexible. In the shock - absorbing member, the bending part in

vertical to the long sides of the shock - absorbing base part is narrower in effective width. In the shock - absorbing member, the bending part in vertical to the long sides of the shock - absorbing base part is thinner in effective thickness. In the shock - absorbing member, the shock - absorbing base part is harder than the shock - absorbing flexible part. At least three pieces of shock - absorbing members are placed between the plane to which the main body of the device and the outer member face. The shock - absorbing member is placed between the plane to which the main body of the device and the outer member face, and the joint plane of the shock - absorbing base part and the shock - absorbing flexible part of the shock - absorbing member placed adjacent to the plane to which the main body of the device and...

...angled to the joint plane 60(degree) at least and 120(degree) at most. The shock - absorbing member is affixed to one of the outside face of the main body of the device and the inside face the outer case. The shock - absorbing member is in one of shapes of cuboid, cylinder, half-cylinder, oval cylinder, half-oval cylinder, and polygonal prism, and the plane of the shock - absorbing member having the shock - absorbing base part is in parallel with the joint plane. The plane of the shock - absorbing member having the shock - absorbing base part is on a boundary of the shock - absorbing member, and an outside peripheral diameter or an outside perimeter of the shock - absorbing base part is smaller than half of an outside peripheral diameter or an outside perimeter of the shock - absorbing member

Because the electronic device of the present invention is manufactured in accordance with above...

...18 may be directly fixed to substrate 9 which is turned at the end.

Next, shock absorbing member 18 is explained using Fig. 2. Fig. 2 (a) is a perspective view of shock absorbing member 18, and Fig. 2 (b) is a side view of the shock - absorbing member showing shock absorbing process of the member. Shock - absorbing member 18 in Fig. 2 (a) is prepared with a commercially available shock - absorbing material used as a shock - absorbing sheet and cut into a specified size. As the shock - absorbing sheet, a composite member of shock - absorbing base part 18a, a thin plate sheet of a flexible resin material provided with a certain level of hardness such as polyethylene, and a shock absorbing flexible part 18b, a very flexible material provided with a cushioning effect, integrally molded one...

...19 and the outside face of magnetic disk drive main body 17.

In this way, shock - absorbing member 18 is formed by integrally molding shock - absorbing base part 18a having a certain level of hardness, and shock absorbing flexible part 18b very flexible and having a cushioning capability, and shock absorbing base part 18a and shock absorbing flexible part 18b both receive a shock in parallel fashion in this constitution. The thickness of the shock absorbing portion of the shock absorbing member 18 (that is, distance between end face 21 and end face 22 of shock - absorbing member 18) is formed into a proper size. With this constitution, when receiving a great impact, although both the shock absorbing base part 18a having a certain level of hardness and the shock absorbing flexible part 18b having a cushion effect receive the initial shock in parallel fashion, shock absorbing base part 18a particularly absorbs the shock, then shock absorbing base part 18a bends at middle part 181 in around a middle part of shock - absorbing base part 18a, and then shock - absorbing part 18a buckles at its bending part near middle part 181 absorbing the load of the impact as it becomes unable to sustain the compressional force, as is illustrated in Fig. 2(b). Subsequently, as a repulsive force of shock - absorbing 18a becomes gradually small, shock - absorbing flexible part 18b mainly absorbs the compressional force afterwards. Shock absorbing base part 18a can be constituted putting shock - absorbing base part 18a having a certain level of

hardness between two flexible parts having a cushion effect, shock - absorbing flexible parts 18b and 18c, as shown in Fig. 2 (c).

Fig. 3 is a drawing schematically illustrating working mechanism of a shock - absorbing member of an electronic device in the preferred embodiment of the present invention. In Fig...

...15 (or can be lower inner case 16) are disposed in parallel. In the illustration, shock - absorbing member 18 is regarded as a hard material linking middle part 181 of shock - absorbing base part 18, and is represented by a thick solid line. Shock - absorbing flexible part 18b is diagrammatically illustrated by a spring. In Fig. 3 (b), change of load of impact F applied to shock - absorbing member 18 and changing ratio P of shock - absorbing capability of shock - absorbing member 18, are graphed for a lapse of time. If substantially a large impact force...

...is applied to outer case 19 of equipment such as by dropping of it, both shock - absorbing base part 18a and shock - absorbing flexible part 18b elastically deforms at an initial stage of the impact, therefore P the changing ratio of shock - absorbing capability per time keeps changing almost along the line F of load of impact until...

...3 (b). When impact load F continues increasing, exceeding a marginal point of linear elastic deformation line, shock - absorbing base part 18a a hard material starts bending at middle part 181 showing warping deformation. These phenomena can be considered that shock - absorbing base part 18a is deforming like bending at middle part 181, making the part a linking point. In this state of warping deformation, P the changing ratio of shock - absorbing capability per time transits ...as to exceed the limit the bending marginal point by the warping deformation of the shock - absorbing base part 18a, the shock - absorbing base part can no more sustains the compressional force and buckles at the bending part near the middle part 181, namely, shock - absorbing part 18a bends near middle part 181 absorbing the load of the impact, as shown in Fig. 2 (b). (This is considered to be a state where shock - absorbing base part 18a is deformed being bent at linking middle part 181, as shown in right side figure in Fig. 3 (a). At this time, shock - absorbing member 18 is deformed by an amount of deformation (δ).) Subsequently, since the repulsive force of shock - absorbing base part 18a to the impact gradually diminishes and shock - absorbing flexible part 18b having cushion effect instead mainly absorbs the impact force, the changing ratio P of shock - absorbing capability gradually diminishes shifting over to right side of V in Fig. 3 (b). The situation in that the impact load F is applied to shock - absorbing member 18 and the changing ratio of shock - absorbing capability per time P moves from U to V is explained by the following analogy...

...P from U to V in Fig. 3 (b).

As it has been explained, the shock - absorbing member in the exemplary embodiment of the present invention is constituted by an integrated unit of the shock - absorbing base part composed of a material having a certain degree of hardness and a flexibility and the shock - absorbing flexible part composed of a very flexible material having a cushion absorbing capability into a unit, and when a large impact is applied, the shock - absorbing member absorbs the impact force by bending the shock - absorbing base part at the middle part and buckling it at the bending part of it, absorbing the shock of the impact. In order to have the shock - absorbing base part buckle without failing at its middle part upon receipt of substantially a large impact, the shock - absorbing base part may be provided with a hole, a cut, or a notch.

For examples...

...the base part with hole 182 in shape of hole in the middle part of shock - absorbing base part 18a of shock - absorbing member 18, as shown in Fig. 4 (a). In order to ensure the buckling, it is also possible to provide cut 183 in a wedge shape in the middle part of shock - absorbing base part 18a of shock - absorbing member 18 in vertical direction to the longer sides of the member, as shown in...

...as well as providing notch 184 in a semicircle shape in the middle part of shock - absorbing base part 18a of shock - absorbing member 18, as shown in Fig. 4 (c). Such shock - absorbing member 18 can also be constituted by putting shock - absorbing flexible part 18b having a cushion effect between two shock - absorbing base parts 18a having a certain degree of hardness and provided with hole 182 in...

...as is shown in Fig. 4 (d). In this case, both of two pieces of shock - absorbing base parts 18a may have a cut or a notch. Shape of the hole, of...

...cylindrical in its cross section and a notch in triangular are allowed.

In Fig. 1, shock absorbing members 18 fitted to surfaces of magnetic disk drive main body 17 are shown in which the joint planes of the shock - absorbing member which is made integrally molding shock absorbing base part 18a and shock absorbing flexible part 18b are positioned in parallel each other, however disposition of the member is not limited to this configuration. For example, a plurality of shock absorbing members 18 can be arranged so as at least one joint plane of shock - absorbing members 18 integrally made by molding shock - absorbing base part 18a and shock - absorbing flexible part 18b may be nearly vertical to or in an angle of 60(degree) to 120(degree) to one of the other joint plane of adjacent shock - absorbing members, which is shown in Fig. 5. In the arrangement of shock absorbing members 18 shown in Fig. 1, when an impact force having a component force is applied practically in a vertical direction to the integrally molded mating face of shock absorbing base part 18a and shock absorbing flexible part 18b, or when shock - absorbing base part 18a of shock - absorbing member 18 is not vertically abutted onto magnetic disk drive main body 17, there is a possibility that shock - absorbing member 18 receiving the impact force does not buckle in near the middle part of shock absorbing base part 18a, the shock absorbing member 18 becomes like falling down unable to fully exhibit its shock absorbing capability. However, by using the arrangement of shock absorbing members 18 shown in Fig. 5, such state like falling down of the shock absorbing member 18 is prevented from occurring because shock - absorbing member 18 buckles in the near middle of the shock absorbing base part 18a, proving a preferable arrangement of the members which exhibits the shock absorbing capability. The number of shock absorbing member 18 fitted to a surface is not limited to three or four pieces, but preferably at least three shock absorbing members 18 are attached as shown in Fig. 5.

Next, effects of the shock absorbing member are described by showing experimental results. Two kinds of shock - absorbing members having a different constitution were prepared for the experiment. One is a shock - absorbing member 42 in conventional constitution, in which shock - absorbing base part 42a of shock absorbing member 42 is bonded to one of an outside surface of magnetic disk drive main body (dummy unit 41) and an inside surface of outer case (stand 43), and shock absorbing member 42b is bonded to the other surface, so that the shock absorbing base part 42a and shock absorbing flexible part 42b are disposed in series. Another is shock absorbing member 47 in the preferred embodiment of the present invention, in which shock - absorbing base part 47a and shock - absorbing flexible part 47b are

disposed in parallel. These constitutions are shown in Fig. 6. Differences of **shock - absorption** in the two constitutions were examined, and obtained results are shown in Fig. 7.

Fig...

...disk drive main body.

In Fig. 7, the curve B, which represents the change of **shock absorption** of the **shock absorbing** members 42 in time in the conventional constitution, shows in Fig. 6 (a) that **shock absorbing** capability of flexible part 42b effectively exerts its **shock absorbing** capability in the beginning stage of receiving shocks showing its **shock absorbing** capability in early stage, however, since the impact force is very large, the **shock absorbing** flexible part 42b is greatly deformed by the impact and increases its resilient repulsing force with lapse of time, therefore value...

...corresponding to a magnetic disk drive main body receives is increased. Finally, state of the **shock - absorption** becomes almost identical to that of a rigidity contact (so-called "bottoming"), and most of the **shock absorbing** capability is lost. On the other hand, in the constitution in the preferred embodiment of...

...present invention where absorbing members 47 are arranged as in case of Fig. 6 (b), **shock absorbing** base part 47a and **shock absorbing** flexible part 47b receive a shock in parallel at the initial stage of receiving the impact, and **shock - absorbing** base part 47a mainly exhibits its elastic repulsive force against the impact. As value G of the impact increases, **shock absorbing** base part 47a is buckled unable to endure the compressive force and lose its elastic repulsive force, then **shock absorbing** flexible part 47b starts receiving the compressional force in placing of **shock absorbing** base part 47a, as graphed by curve C in Fig. 7. Thus, in this constitution, the compressional force is received for a longer period of time, therefore the **shock absorbing** effect of this method is proved to be greater than that of the conventional **shock absorbing** method in which **shock absorbing** members 42 are used in series.

In Fig. 7, the curve A shows that the...

...obtained regardless the direction of the impact.

In the above description and the drawing, the **shock absorbing** member in cuboid shape is explained as an example. However, the shape of the **shock absorbing** member of the present invention is not limited to the cuboid shape, and **shock - absorbing** member in various shape can be used, in shape such as of cylinder, half-cylinder, oval cylinder, half-oval cylinder, and polygonal prism shown in Fig. 8. Such **shock - absorbing** members can be composed integrally molding or bonding a **shock absorbing** flexible part - a highly soft material having a cushion capability and formed into a relatively...

...shapes of cylinder, half-cylinder, oval cylinder, half-oval cylinder, and polygonal prism, and a **shock absorbing** base part - a thin-plate sheet made from **resin** material having a certain level of hardness and flexibility, such as **polyethylene**, and cutting into a certain size of width and thickness. When manufacturing the **shock - absorbing** member, it is preferable that the **shock - absorbing** base part is bonded to a portion in less than half of peripheral diameter or perimeter of the **shock absorbing** flexible part. In Fig. 8, three pieces or four pieces of **shock absorbing** members in different shape are arranged as examples to be disposed a main body of...

...be used as portable equipment.

If an extremely large impact load is applied as the **shock - absorbing** base part of the **shock - absorbing** member has to buckle for absorbing the impact, the **shock - absorbing** capability of the **shock - absorbing** member becomes insufficient. In case of it, it is advisable a

sensor detecting buckling of a shock - absorbing member is attached to the shock - absorbing member. A countermeasure is taken by equipping electronic equipment with a displaying system which urges replacement of the shock - absorbing member based on the signal indicating the buckle of the member.

As described above, the shock - absorbing method and the electronic device using the method are realized in the preferred embodiment of the present invention. In the method, the electronic device is enabled to have a smaller shock - absorbing effect but relatively a larger shock-repulsive power at an initial stage of receiving the impact, a larger shock repulsive power but smaller shock - absorbing effect after a lapse of specified time period, thereby the electronic device is enabled to receive a compressional force for relatively a long period of time, when subjected to a great impact such...

...any harsh impact, the device is prevented from getting a serious damage, and an outstanding shock absorbing capability is provided.

EXPLANATION OF INDUSTRIAL APPLICABILITY OF INVENTION

As described above, the present invention comprises a shock - absorbing member, a shock absorbing method and an electronic equipment utilizing those. The shock - absorbing member is composed of a shock absorbing base part and a shock - absorbing flexible part, in which thickness of the shock - absorbing base part is smaller than that of the shock - absorbing flexible part and the shock - absorbing base part buckles at its bending part when receiving an impact. A plurality of such shock - absorbing members is disposed between an electronic device main body and an outer case, or at least three pieces of the shock - absorbing members are placed between faces of an outside of the electronic device main body and an inside of the outer case.

The invention realizes a large effect by providing a shock - absorbing member having a superb shock - absorbing capability which, even when subjected to a very large impact, endures a compressional force substantially a long period of time, helps to decrease the impact the main body...

...one, and avoids a serious damage to the main body of electronic equipment; and a shock - absorbing method of electronic equipment utilizing the member.

The electronic equipment employing the shock - absorbing member and the shock - absorbing method is provided with a large shock - absorbing capability. The main body of equipment is prevented from receiving a large compressional force, and is avoided from a fatal damage is caused.

Reference marks in the drawings...

...CLAIMS A1

1. A shock - absorbing member disposed on a main body of equipment, and comprising a shock - absorbing base part and a shock - absorbing flexible part,

wherein the shock - absorbing base part has a thickness smaller than that of the shock - absorbing flexible part, and the shock - absorbing base part buckles so as to absorb a shock when receiving an impact.

2. The shock - absorbing member according to claim 1, wherein the shock - absorbing base part forms a bending part which is vertical to the shock direction, and starts buckling at the bending part of the shock - absorbing base part so as to absorb a shock when receiving an impact.
3. The shock-absorbing member according to claim 1, wherein the...

...higher than that of the shock-absorbing flexible part.

8. An electronic device having a **shock - absorbing** member which is composed of a **shock - absorbing** base part and a **shock - absorbing** flexible part and is disposed outside a main body of the device, wherein the **shock - absorbing** base part has a thickness smaller than that of the **shock - absorbing** flexible part, and the **shock - absorbing** base part buckles so as to absorb a shock when receiving a shock of impact.
9. The electronic device according to claim 8, wherein the **shock - absorbing** base part forms a **bending** part which is vertical to the shock direction, and starts buckling at the **bending** part of the **shock - absorbing** base part so as to absorb a shock when receiving an impact.
10. The electronic device according to claim 8, wherein a long...

...face is smaller than half an outside peripheral diameter or an outside perimeter of the **shock - absorbing** member.

20. A **shock - absorbing** method of an electronic device including a **shock - absorbing** member formed by integrally molding a **shock - absorbing** base part and the **shock - absorbing** flexible part, wherein the **shock - absorbing** base part is thinner than the **shock - absorbing** flexible part, and the **shock - absorbing** base part buckles so as to absorb a shock when receiving an impact.
21. The **shock - absorbing** method according to claim 20, wherein the **shock - absorbing** base part forms a **bending** part which is vertical to the shock direction, and starts buckling at the **bending** part of the **shock - absorbing** base part so as to absorb a shock when receiving an impact.
22. The **shock - absorbing** method of an electronic device according to claim 20 or claim 21,

wherein, when the **shock - absorbing** member absorbs the shock of the impact by buckling the **shock - absorbing** base part, the **shock - absorbing** base part buckles and absorbs the shock of the impact at an initial stage of receiving the impact, then the **shock - absorbing** flexible part mainly absorbs the shock.

23. The **shock - absorbing** method of an electronic device according to claim 18 or claim 21,

wherein the shock...

13/3,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01789092

Head support device and disk drive using the same
Kopftrageranordnung und Plattenlaufwerk dieses benutzend

Dispositif de support d'une tete et disque-dur utilisant ce support
PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 1460616 A1 040922 (Basic)
EP 1460616 A1 040922
APPLICATION (CC, No, Date): EP 2004004254 040225;
PRIORITY (CC, No, Date): JP 200378033 030320
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS (V7): G11B-005/48; G11B-005/60
ABSTRACT WORD COUNT: 7571
NOTE:

Figure number on first page: NONE

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200439	721
SPEC A	(English)	200439	6233
Total word count - document A			6954
Total word count - document B			0
Total word count - documents A + B			6954

...SPECIFICATION at two pivot fulcrums 45b provided in both sides of width direction can improve the shock resistance and stability for twisting effectively. In the structure shown in FIG. 4, head suspension 42...

13/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01674580
Magnetic head apparatus, magnetic head supporting mechanism and magnetic recording apparatus
Magnetkopfverfahren, Magnetkopfbefestigungsmechanismus und magnetisches Aufnahmegerat
Tete magnetique, support pour tete magnetique et appareil d'enregistrement magnetique

PATENT ASSIGNEE:

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Kuwajima, Hideki, 36-3, Shimobetto-cho, kitashirakawa, Sakyo-ku, Kyoto-shi, Kyoto, (JP)

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PATENT (CC, No, Kind, Date): EP 1376544 A1 040102 (Basic)

APPLICATION (CC, No, Date): EP 2003014757 030627;

PRIORITY (CC, No, Date): JP 2002190343 020628

DESIGNATED STATES: DE; FR; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK

INTERNATIONAL PATENT CLASS (V7): G11B-005/48

ABSTRACT WORD COUNT: 136

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LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200401	1254
SPEC A	(English)	200401	6795
Total word count - document A			8049
Total word count - document B			0
Total word count - documents A + B			8049

...SPECIFICATION shown in Fig. 9. In addition, if the dead weight 62 is made of a **vibration** damping member (or **damper**), it is possible to reduce the peak value of resonance with respect to the magnetic...

File 9:Business & Industry(R) Jul/1994-2006/Jul 07
 (c) 2006 The Gale Group
 File 15:ABI/Inform(R) 1971-2006/Jul 10
 (c) 2006 ProQuest Info&Learning
 File 16:Gale Group PROMT(R) 1990-2006/Jul 07
 (c) 2006 The Gale Group
 File 20:Dialog Global Reporter 1997-2006/Jul 10
 (c) 2006 Dialog
 File 47:Gale Group Magazine DB(TM) 1959-2006/Jul 06
 (c) 2006 The Gale group
 File 75:TGG Management Contents(R) 86-2006/Jul W1
 (c) 2006 The Gale Group
 File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Jul 07
 (c) 2006 The Gale Group
 File 88:Gale Group Business A.R.T.S. 1976-2006/Jun 28
 (c) 2006 The Gale Group
 File 98:General Sci Abs 1984-2005/Jan
 (c) 2006 The HW Wilson Co.
 File 112:UBM Industry News 1998-2004/Jan 27
 (c) 2004 United Business Media
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2006/Jul 07
 (c) 2006 The Gale Group
 File 264:DIALOG Defense Newsletters 1989-2006/Jul 07
 (c) 2006 Dialog
 File 484:Periodical Abs Plustext 1986-2006/Jul W1
 (c) 2006 ProQuest
 File 553:Wilson Bus. Abs. 1982-2006/Jul
 (c) 2006 The HW Wilson Co
 File 570:Gale Group MARS(R) 1984-2006/Jul 07
 (c) 2006 The Gale Group
 File 620:EIU:Viewswire 2006/Jul 08
 (c) 2006 Economist Intelligence Unit
 File 621:Gale Group New Prod.Annou.(R) 1985-2006/Jul 06
 (c) 2006 The Gale Group
 File 623:Business Week 1985-2006/Jul 07
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 File 624:McGraw-Hill Publications 1985-2006/Jul 07
 (c) 2006 McGraw-Hill Co. Inc
 File 634:San Jose Mercury Jun 1985-2006/Jul 07
 (c) 2006 San Jose Mercury News
 File 635:Business Dateline(R) 1985-2006/Jul 08
 (c) 2006 ProQuest Info&Learning
 File 636:Gale Group Newsletter DB(TM) 1987-2006/Jul 07
 (c) 2006 The Gale Group
 File 647:cmp Computer Fulltext 1988-2006/Aug W2
 (c) 2006 CMP Media, LLC
 File 696:DIALOG Telecom. Newsletters 1995-2006/Jul 05
 (c) 2006 Dialog
 File 674:Computer News Fulltext 1989-2006/Jul W1
 (c) 2006 IDG Communications
 File 810:Business Wire 1986-1999/Feb 28
 (c) 1999 Business Wire
 File 813:PR Newswire 1987-1999/Apr 30
 (c) 1999 PR Newswire Association Inc
 File 587:Jane's Defense&Aerospace 2006/Jul W1
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Set	Items	Description
S1	56660	(VIBRAT? OR SHOCK OR SEISMIC) (3N) (ABSORPTION OR ABSORB?? - OR DAMP? OR RESIST? OR CUSHION)
S2	319442	(ELECTRONIC() (DEVICE?? OR UNIT?? OR SYSTEM?? OR APPARATUS)

OR (CD OR DVD OR (DIGITAL()VERSATILE OR COMPACT) ()DISC?? OR D-
ISK??)) () (PLAYER?? OR UNITS OR SYSTEM??)
S3 537957 RESIN?? OR POLYETHYLENE
S4 3262078 BUCKLE?? OR BUCKLING OR BEND?? OR MOMENT OR TOURQUE OR C-
OMPRESS? OR DEFORM?
S5 3 AU=(KUWAJIMA, H? OR KUWAJIMA H?)
S6 7760768 (CAPTUR? OR DIGITAL()VIDEO()STORAGE) (3N)DEVICE?? OR MEDIA
S7 907 S1(S) (S2 OR S6)
S8 5 S7(3N) (S3 OR S4)
S9 0 S7 AND S5
S10 2 S5 NOT PY>2003

8/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2006 The Gale Group. All rts. reserv.

07689839 Supplier Number: 63976776 (USE FORMAT 7 FOR FULLTEXT)
Applications upgrading mills for improved operation.
Associates, Lawrence R. Gooch Gooch Engineering
Rubber & Plastics News, v30, n1, p21
August 7, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 3462

... iron has proven a remarkably well-suited choice of material. It is tough, strong in compression and dampens vibration well. It can be made in almost any shape, dependent upon only the skill of...

8/3,K/2 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
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46518341 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Macworld Conference & Expo 2006 Exhibitor Profiles
BUSINESS WIRE
January 10, 2006
JOURNAL CODE: WBWE LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 6753

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... developed since November 2004 exclusively for the Mac community.
Company: PumpPod, LLC Booth/Stand: 951 Media Contact/Email: Lance Buckley ; 212.789.1063; lance@piercemattie.com Investor Relations Contact/Email: Craig Schlossberg, President, 212-982...

8/3,K/3 (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)
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01101742
Superalloys: technology: Ceramic foam proves effective.
AMERICAN METAL MARKET November 8, 1984 p. 19a1

... recently have been developed that resist crumbling due to handling, resist spalling due to thermal shock, and resist creep deformation under the load of metal flowing up to 1,700C.

8/3,K/4 (Item 1 from file: 275)

DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01101037 SUPPLIER NUMBER: 00662700
Ensuring Media Reliability and Data Integrity.
DeStefano, J.V.
Systems & Software, v3, n2, p163
Feb., 1984
DOCUMENT TYPE: evaluation ISSN: 0039-8047 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

...ABSTRACT: over a semi-rigid jacket with a metal shutter, one being that the jacket and media bend together without damage to the media. Dysan also incorporates data integrity from static discharge by...

8/3,K/5 (Item 1 from file: 587)
DIALOG(R)File 587:Jane`s Defense&Aerospace
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10932016 Word Count:3634
Green issues loom larger in future
JANE'S NAVY INTERNATIONAL (JNI) October 15, 2004 v.109 no. 009
Section Heading: SPECIAL REPORTS
By: Joris Janssen Lok

...material sensor panels on the outside, backed by a reflector plate and a rubber-type bending wave absorber to eliminate the vibrations from the steel structure (constructed from damping material for the steel structure belonging to the...

10/3,K/1 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
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06301613 SUPPLIER NUMBER: 94130496
Thin-film piezoelectric DSA for HDD.(hard disk drives)(Abstract)
Kuwajima, Hideki ; Matsuoka, Kaoru
IEEE Transactions on Magnetics, 38, 5, 2186(3)
Sept, 2002
DOCUMENT TYPE: Abstract ISSN: 0018-9464 LANGUAGE: English
RECORD TYPE: Abstract

Kuwajima, Hideki ...

10/3,K/2 (Item 2 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
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06301603 SUPPLIER NUMBER: 94130486
Manufacturing process of piezoelectric thin-film dual-stage actuator and its reliability for HDD.(hard disk drives)(Abstract)
Kuwajima, Hideki ; Uchiyama, Hirokazu; Ogawa, Yuko; Kita, Hiroyuki; Matsuoka, Kaoru
IEEE Transactions on Magnetics, 38, 5, 2156(3)
Sept, 2002
DOCUMENT TYPE: Abstract ISSN: 0018-9464 LANGUAGE: English
RECORD TYPE: Abstract

Kuwajima, Hideki ...